

DAFTAR PUSTAKA

- Ambo-Rappe, R., M.N. Nessa, H. Latuconsina, & D.L. Lajus. 2013. *Relationship between the tropical seagrass bed characteristics and the structure of the associated fish community*. *Open J. of Ecology*, 3(5): 331-342.
- Andriyani, M. F. 2018. Pengaruh Salinitas Terhadap Tingkat Kelangsungan Hidup Dan Profil Daerah Ikan Nila (*Oreochromis Niloticus*) Yang Diberi Kombinasi Pakan Dan Buah Mengkudu (*Morinda Citrifolia L.*) (Doctoral Dissertation, Universitas Muhammadiyah Gersik).
- Ayunarita, S., & Galib, M. 2017. Studi Pola Arus, Pasang Surut Dan Gelombang Di Perairan Pantai Pelawan Desa Pangke Kecamatan Meral Kabupaten Karimun Provinsi Kepulauan Riau. Fak. Perikanan. Dan Kelautan. Univ. Riau. Pekanbaru.
- Bengkal, K.P., Manembu, B.T., Sondak, C.F.A, Wagey, B.T., Schadu, J.N.W & Lumingas, L.J.L. 2019. Identifikasi Keanekaragaman Lamun Dan Echinodermata Dalam Upaya Konservasi. *Jurnal Pesisir Dan Laut Tropis*, 1(1): 29-39.
- Dahuri, R, R Jacob, P.G Sapta, Dan M. J . Sitepu., 2001. Pengelolaan Sumberdaya Wilayah Pesisir Dan Lautan Terpadu, Pt. Pradnya Paramita, Jakarta.
- Dahuri, R., J. Rais, S.P. Ginting & M.J. Sitepu. 2001. Pengelolaan Sumber Daya Wilayah Pesisir Dan Lautan Secara Terpadu. Pt. Pradnya Paramita, Jakarta.
- Estafani, S. 2023. Perubahan Tutupan Lamun Di Perairan Pulau Bonetambung, Tahun 2015 - 2022 *Changes In Seagrass Cover In The Waters Of Bonetambung Island, 2015-2022* (Doctoral Dissertation, Universitas Hasanuddin).
- Fahrudin, M.F., Yulianda. & Setyobudiandi, I. 2017. Kerapatan Dan Penutupan Ekosistem Lamun Di Pesisir Desa Bahoi, Sulawesi Utara. *Jurnal Ilmu Dan Teknologi Kelautan Tropis*. 9(1) : 375-383.
- Faishol, M. L., Nurcahyo, H., Nugroho, D. A. S., Rizky-Rb, M, A., & Hutanto, Y. 2016. Ekosistem Lamun Di Taman Wisata Perairan Kepulauan Anambas. Kawasan Konservasi Perairan Nasional Pekanbaru.
- Fitra, F., Zakaria, I, J., & Syamsuardi. 2012. Produktivitas Primer Fitoplankton Di Teluk Bungus. *Jurnal Fmipa Unila*, 1(1), 34-36
- Fredriksen, S., De Backer, A., Boström, C. & Christie, H. 2010. *Infauna From Zostera Marina L. Meadows In Norway. Differences In Vegetated And Unvegetated Areas*. *Marine Biology Research*, 6(2):189-200.
- Hasanuddin, R. 2013. Hubungan Antara Kerapatan Dan Morfometrik Lamun *Enhalus Acoroides* Dengan Substrat Dan Nutrien Di Pulau Sarappo Lompo Kab. Pangkep. Skripsi. Jurusan Ilmu Kelautan, Fakultas Ilmu Kelautan Dan Perikanan Universitas Hasanuddin. Makassar.
- Jumniaty, S. 2013. Tingkat Kelangsungan Hidup Dan Laju Pertumbuhan *Enhalus Acoroides* Yang Ditransplantasi Dengan Metode Staple Pada Apo (Alat Pemecah Ombak) Dan Tanpa Apo Di Kabupaten Pangkep. Skripsi. Jurusan Ilmu Kelautan, Fakultas Ilmu Kelautan Dan Perikanan, Universitas Hasanuddin.
- Keputusan Menteri Lingkungan Hidup Nomor 200 Tahun 2004 Tentang Kriteria Baku Kerusakan Padang Lamun. Jakarta: Sekretariat Negara.

- Keputusan Menteri Lingkungan Hidup Nomor 51 Tahun 2004 Tentang Baku Mutu Air. Jakarta: Sekretariat Negara.
- La Nafie, Y.A., 2016. *Seagrass Responses To Interacting Abiotic Stresses. Phd Thesis, Radboud University Nijmegen, 124p. With Summaries In English, Dutch And Bahasa Indonesia.*
- Lanyon. J. 1986. *Seagrass of the Great Barrier Reef. Queensland: Nadicprint Services Pty.Ltd Ludwig And Reynolds, 1988. Statistical Ecology A Prime*
- LIPI. 2014. Panduan Teknis Pemetaan Habitat Dasar Perairan Laut Dangkal. Jakarta, Indonesia: Pusat Penelitian Oseanografi Lembaga Ilmu Pengetahuan Indonesia.
- Martha, L. G. M. R., Julyantoro, P. G. S., & Sari, A. H. W. 2019. Kondisi Dan Keaneekaragaman Jenis Lamun Di Perairan Pulau Serangan, Provinsi Bali. *Journal Of Marine And Aquatic Sciences*, 5(1), 131-141.
- Newmaster Af, Berg Kj, Ragupathy S, Palanisamy M, Sambandan K, & Newmaster Sg. 2011. *Local Knowledge And Conservation Of Seagrass In The Tamil Nadu State Of India. Journal Of Ethnobiology And Ethnomedicine* 7:37.
- Nontji, A. 2007. Laut Nusantara. Djambatan, Jakarta. 356 Hal.
- Nugraha, C. O. C. 2016. Analisa Pengaruh Variasi Heat Input Dan Salinitas Terhadap Sifat Mekanik Weld Joint Material Baja A36 Pada Pengelasan *Smaw Underwater Wet Welding* (Doctoral Dissertation, Insitut Teknologi Sepuluh Nopember).
- Nuraulia, N. J. 2020. Pemetaan Padang Lamun Menggunakan Citra Sentinel-2a Di Perairan Sari Ringgung Kabupaten Pesawaran Provinsi Lampung. Skripsi. Program Sarjana, Program Studi Ilmu Kelautan, Fakultas Matematika Dan Ilmu Pengetahuan Alam Universitas Sriwijaya.
- Pangkatana. 2017. Lamun (Seagrass). Buku Ajar
- Poedjirahajoe, E., Mahayani, N. P. D., Sidharta, B. R., & Salamuddin, M. 2013. Tutupan Lamun Dan Kondisi Ekosistemnya Di Kawasan Pesisir Madasanger, Jelenga, Dan Maluku Kabupaten Sumbawa Barat *Seagress Coverage And Ecosystem Condition At The Coastal Area Of Madasanger, Jelenga And Maluku, West Sumbawa*. *Jurnal Ilmu Dan Teknologi Kelautan Tropis*, 5(1), 37.
- Pribadi, W., Dan Hariyanto, T. 2012. Inventarisasi Lahan Pertanian Di Kabupaten Sidoarjo Menggunakan Citra Satelit Multitemporal. *Geoid*. 8(1) : 23-28
- Putra, F. Z. Y. Analisis Perubahan Luasan Tutupan Lamun Secara Spasial Dan Temporal Di Pulau Kodingareng Lompo Menggunakan Teknologi Penginderaan Jauh.
- Rahman, A. A., Nur, A. I., & Ramli, M. 2016. Studi Laju Pertumbuhan Lamun (*Enhalus Acoroides*) Di Perairan Pantai Desa Tanjung Tiram Kabupaten Konawe Selatan (*Doctoral Dissertation, Haluoleo University*).
- Rahman, A.A., Nur, A.I. & Ramli, M. 2022..Studi Laju Pertumbuhan Lamun (*Enhalus Acoroides*) Di Perairan Pantai Desa Tanjung Tiram Kabupaten Konawe Selatan. *Sapa Laut*,1(1):10-16.

- Ramili, Y., Bengen, D. G., Madduppa, H., & Kawaroe, M. 2018. Struktur Dan Asosiasi Jenis Lamun Di Perairan Pulau-Pulau Hiri, Ternate, Maitara Dan Tidore, Maluku Utara. *Jurnal Ilmu Dan Teknologi Kelautan Tropis*, 10(3), 651-665.
- Riswandi, A. D., Melani, R. M., & Putra, R. D. 2016. Kajian Tutupan Lamun Berdasarkan Jenis Substrat Di Perairan Desa Seborg Perek Kecamatan Teluk Seborg. *Repository Umrah*.
- Rosalina, D. 2012. Struktur Tentang Struktur Komunitas Lamun Dan Faktor-Faktor Fisika Dan Kimia Yang Mempengaruhi Pertumbuhan Lamun Di Kabupaten Bangka Tengah. *Akuatik*, 6(1), 22-26.
- Rosdiana, R., Hadijah, H., & Ratnawati, R. 2023. Hubungan Kerapatan Lamun *Enhalus Acoroides* Terhadap Kerapatan Anggur Laut *Caulerpa Sp.* Di Perairan Kabupaten Takalar. *Journal Of Aquaculture And Environment*, 6(1), 61-66.
- Rugebrgt, M. J., Matuanakotta, C., Syahfrizal. 2020. Keanekaragaman Jenis, Tutupan Lamun Dan Kualitas Air Di Perairan Teluk Ambon. *Jurnal Ilmu Lingkungan Vol. 18 No. 3*: 589-594
- Sakaruddin, M. I. 2011. Komposisi jenis, kerapatan, persen penutupan dan luas penutupan lamun di perairan Pulau Panjang tahun 1990 - 2010.
- Sari, R. M., Kurniawan, D., & Sabriyati, D. (2021). Kerapatan dan Pola Sebaran Lamun Berdasarkan Aktivitas Masyarakat di Perairan Pengujan Kabupaten Bintan. *Journal of Marine Research*, 10(4), 527-534.
- Setiawan, F., Harahap, S. A., Andriani, Y., & Hutahaean, A. A. 2012. Deteksi Perubahan Padang Lamun Menggunakan Teknologi Penginderaan Jauh Dan Kaitannya Dengan Kemampuan Menyimpan Karbon Di Perairan Teluk Banten. *Jurnal Perikanan Kelautan*, 3(3).
- Siregar, A. O. 2022. Pemetaan Sebaran Dan Tutupan Lamun Menggunakan Citra Satelit Sentinel-2 Di Pulau Dua Kecamatan Enggano Provinsi Bengkulu. *Jurnal Laut Khatulistiwa*, 5(3), 125-137.
- Sjafrie, N.D.M., Hernawan, U.E., Prayudha, B., Supriyadi, I.H., & Iswari, M.Y., 2018. Status Padang Lamun Di Indoenesia 2018, 2nd Ed, 2. Pusat Penelitian Oseanografi Lembaga Ilmu Pengetahuan Indonesia.
- Somantri, L. 2008. Pemanfaatan Teknik Penginderaan Jauh Untuk Mengidentifikasi Kerentanan Dan Risiko Banjir. *Jurnal Geografi Gea*, 8(2).
- Sulasteri, S., Apriadi, T., & Melani, W. R. 2022. Tingkat Kesuburan Perairan Desa Mantang Baru, Kecamatan Mantang, Kabupaten Bintan. *Jurnal Kelautan: Indonesian Journal Of Marine Science And Technology*, 15(2), 100-105.
- Sulfiani. 2011. Pemetaan Lamun Dengan Menggunakan Citra Satelit Alos Di Perairan Pulau Pari. Skripsi. Departemen Ilmu Dan Teknologi Kelautan. Fakultas Perikanan Dan Ilmu Kelautan. Institut Pertanian Bogor.
- Sutadi, S., Sulistyowati, L., & Sriwiyono, E. 2021. Analisis Hubungan Atribut Ekologi Lamun Dengan Kualitas Perairan Di Taman Nasional Baluran Kabupaten Situbondo. *Scientific Journal Of Reflection: Economic, Accounting, Management And Business*, 4(2), 391-401.
- Syah, A. F. 2010. Penginderaan Jauh Dan Aplikasinya Di Wilayah Pesisir Dan Lautan. *Jurnal Kelautan: Indonesian Journal Of Marine Science And Technology*, 3(1), 18-28.

- Tangke, U. 2010. Ekosistem Padang Lamun (Manfaat, Fungsi Dan Rehabilitasi). Jurnal Ilmiah Agribisnis Dan Perikanan (Agrikan Ummu-Ternate) 3 (1). Ternate.
- Thalib, M. S. 2017. Klasifikasi Tutupan Lamun Menggunakan Data Citra Sentinel-2a Di Pulau Bontosua, Kepulauan Spermonde. Skripsi. Program Sarjana, Program Studi Ilmu Kelautan, Fakultas Ilmu Kelautan Dan Perikanan Universitas Hasanuddin.
- Tishmawati, N.C., Suryanti., & Ain, C. 2014. Hubungan Kerapatan Lamun (*Seagrass*) Dengan Kelimpahan *Syngnathidae* Di Pulau Panggang Kepulauan Seribu. Jurnal Maquares. 3(4): 147-153.
- Wagey, B. T., & Sake, W. 2013. Variasi Morfometrik Beberapa Jenis Lamun Di Perairan Kelurahan Tongkeina Kecamatan Bunaken. Jurnal Pesisir Dan Laut Tropis, 1(3), 36-44.
- Wangkanusa, M. S., Kondoy, K. I., & Rondonuwu, A. B. 2017. Identifikasi Kerapatan Dan Karakter Morfometrik Lamun *Enhalus Acoroides* Pada Substrat Yang Berbeda Di Pantai Tongkeina Kota Manado. Jurnal Ilmiah Platax, 5(2), 210-220.
- Waycott, M., K. McMahan, J. Mellors, A. Calladine, And D. Kleine, 2004. *A Guide To Tropical Seagrasses Of The Indo-West Pacific*. James Cook University, Townsville-Queenslandaustralia.
- Yunitha, A., Wardiatno, Y., & Yulianda, F. 2014. Diameter Substrat Dan Jenis Lamun Di Pesisir Baho Minahasa Utara: Sebuah Analisis Korelasi. Jurnal Ilmu Pertanian Indonesia, 19(3), 130-135.

LAMPIRAN

Lampiran 1. Perhitungan Nilai Tutupan Lamun Di Pulau Bangkobangkoang

KOORDINAT		STASIUN	TITIK	Nilai Tutupan (%)				TOTAL	Rata-Rata % Tutupan total	Kondisi
Latitude	Longitude			1	2	3	4			
-4773441	119.432229	1	1	59,96%	30,11%	64,63%	48,52%	203,23%	50,81%	Kurang
-4.772810	119.431609		2	24,70%	32,28%	53,31%	59,77%	170,07%	42,52%	kaya/kurang
-4.772100	119.431146		3	49,32%	22,65%	44,39%	0,00%	116,35%	29,09%	sehat
			Rata-rata					40,80%		
-4773096	119.432816	2	1	68,00%	30,83%	35,03%	34,04%	167,90%	41,97%	Kurang
-4772461	119.432508		2	34,40%	24,20%	40,35%	50,30%	149,25%	37,31%	kaya/kurang
-4772026	119.432172		3	55,12%	29,88%	44,42%	43,00%	172,43%	43,11%	sehat
			Rata-rata					40,80%		
-4.770970	119.431600	3	1	85,96%	21,13%	74,90%	69,04%	251,03%	62,76%	Kurang
-4.770313	119.431967		2	86,18%	44,43%	81,71%	81,31%	293,63%	73,41%	kaya/kurang
-4.770054	119.432895		3	28,89%	0,00%	34,33%	53,88%	117,10%	29,28%	sehat
			Rata-rata					55,15%		
-4.778707	119.434054	4	1	15,78%	0,00%	0,00%	13,79%	29,57%	7,39%	Miskin
-4.778207	119.433706		2	10,54%	12,76%	21,88%	0,00%	45,18%	11,30%	
-4.777831	119.433247		3	0,00%	0,00%	0,00%	16,66%	16,66%	4,16%	
			Rata-rata					7,62%		
-4.771137	119.437663	5	1	61,53%	19,51%	57,92%	51,43%	190,38%	47,60%	Kurang
-4.770918	119.437523		2	68,57%	40,93%	67,31%	69,42%	246,22%	61,56%	kaya/kurang
-4.770705	119.437413		3	57,15%	63,17%	56,82%	64,23%	241,37%	60,34%	sehat
			Rata-rata					56,50%		

Lampiran 2. Nilai Parameter Lingkungan Di Perairan Pulau Bangkobangkoang

STA	TITIK	POSISI		SALINITAS (‰)	SUHU (°C)	KEDALAMAN (cm)	KEKERUHAN (NTU)	ARUS (m/s)	SUBSTRAT (mm)
		Lat	Lon						
1	1	-4.773441	119.432229	35	28	55	0,04	0,69	0,10
	2	-4.772810	119.431609	33	29	70	0,25	0,72	0,46
	3	-4.772100	119.431146	33	29	60	0,54	0,79	0,51
	RATA-RATA				33,67	28,67	61,67	0,28	0,73
2	1	-4773096	119.432816	34	28	58	0,46	0,64	0,57
	2	-4772461	119.432508	32	28	65	0,57	0,72	0,52
	3	-4772026	119.432172	33	29	50	0,31	0,67	0,51
	RATA-RATA				33	28,33	57,67	0,45	0,68
3	1	-4.770970	119.431600	33	28	75	2,12	0,98	0,41
	2	-4.770313	119.431967	34	29	80	1,01	0,05	0,49
	3	-4.770054	119.432895	33	28	80	1,62	0,02	0,49
	RATA-RATA				33,33	28,33	78,33	1,58	0,35
4	1	-4.778707	119.434054	35	29	28	3,72	0,02	0,58
	2	-4.778207	119.433706	34	29	25	2,97	0,05	0,48
	3	-4.777831	119.433247	35	29	50	3,93	0,83	0,38
	RATA-RATA				34,67	29	34,33	3,54	0,30
5	1	-4.771137	119.437663	34	29	100	0,67	0,19	0,43
	2	-4.770918	119.437523	35	30	100	0,36	0,22	0,31
	3	-4.770705	119.437413	35	29	100	0,91	0,2	0,39

RATA-RATA	34,67	29,33	100	0,65	0,20	0,38
------------------	-------	-------	-----	------	------	------

Lampiran 3. Uji Normalitas

Tests of Normality							
STASIUN	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Tutupan Lamun	1	.295	3	.919	3	.450	
	2	.315	3	.891	3	.356	
	3	.296	3	.918	3	.446	
	4	.192	3	.997	3	.895	
	5	.357	3	.815	3	.151	
Salinitas	1	.385	3	.750	3	.000	
	2	.175	3	1.000	3	1.000	
	3	.385	3	.750	3	.000	
	4	.385	3	.750	3	.000	
	5	.385	3	.750	3	.000	
Kekeruhan	1	.209	3	.992	3	.824	
	2	.207	3	.992	3	.831	
	3	.193	3	.997	3	.891	
	4	.306	3	.905	3	.400	
	5	.200	3	.995	3	.860	
Suhu	1	.385	3	.750	3	.000	
	2	.385	3	.750	3	.000	
	3	.385	3	.750	3	.000	
	4	.	3	.	3	.	
	5	.385	3	.750	3	.000	
Arus	1	.269	3	.949	3	.567	
	2	.232	3	.980	3	.726	
	3	.375	3	.773	3	.052	
	4	.374	3	.778	3	.062	
	5	.253	3	.964	3	.637	
Kedalaman	1	.253	3	.964	3	.637	
	2	.184	3	.999	3	.927	
	3	.385	3	.750	3	.000	
	4	.345	3	.839	3	.210	
	5	.	3	.	3	.	
Substrat	1	.350	3	.829	3	.186	
	2	.345	3	.839	3	.213	
	3	.377	3	.769	3	.042	
	4	.178	3	.999	3	.956	
	5	.266	3	.952	3	.579	

Lampiran 4. Hasil Uji Korelasi

		Correlations						
		Salinitas	Tutupan Lamun	Kekeruhan	Suhu	Arus	Kedalaman	Substrat
Salinitas	Pearson Correlation	1	-.067	.312	.421	-.363	.002	-.464
	Sig. (2-tailed)		.813	.258	.118	.184	.993	.081
	N	15	15	15	15	15	15	15
Tutupan Lamun	Pearson Correlation	-.067	1	-.693**	.005	.038	.736**	-.309
	Sig. (2-tailed)	.813		.004	.985	.894	.002	.262
	N	15	15	15	15	15	15	15
Kekeruhan	Pearson Correlation	.312	-.693**	1	.069	-.196	-.524*	.220
	Sig. (2-tailed)	.258	.004		.806	.483	.045	.430
	N	15	15	15	15	15	15	15
Suhu	Pearson Correlation	.421	.005	.069	1	-.352	.166	-.014
	Sig. (2-tailed)	.118	.985	.806		.198	.554	.961
	N	15	15	15	15	15	15	15
Arus	Pearson Correlation	-.363	.038	-.196	-.352	1	-.124	-.178
	Sig. (2-tailed)	.184	.894	.483	.198		.660	.526
	N	15	15	15	15	15	15	15
Kedalaman	Pearson Correlation	.002	.736**	-.524*	.166	-.124	1	-.255
	Sig. (2-tailed)	.993	.002	.045	.554	.660		.360
	N	15	15	15	15	15	15	15
Substrat	Pearson Correlation	-.464	-.309	.220	-.014	-.178	-.255	1
	Sig. (2-tailed)	.081	.262	.430	.961	.526	.360	
	N	15	15	15	15	15	15	15

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Lampiran 4. Lanjutan

		Correlations						
		Kekeruhan	Tutupan Lamun	Salinitas	Suhu	Arus	Kedalaman	Substrat
Kekeruhan	Pearson Correlation	1	-.693**	.312	.069	-.196	-.524*	.220
	Sig. (2-tailed)		.004	.258	.806	.483	.045	.430
	N	15	15	15	15	15	15	15
Tutupan Lamun	Pearson Correlation	-.693**	1	-.067	.005	.038	.736**	-.309
	Sig. (2-tailed)	.004		.813	.985	.894	.002	.262
	N	15	15	15	15	15	15	15
Salinitas	Pearson Correlation	.312	-.067	1	.421	-.363	.002	-.464
	Sig. (2-tailed)	.258	.813		.118	.184	.993	.081
	N	15	15	15	15	15	15	15
Suhu	Pearson Correlation	.069	.005	.421	1	-.352	.166	-.014
	Sig. (2-tailed)	.806	.985	.118		.198	.554	.961
	N	15	15	15	15	15	15	15
Arus	Pearson Correlation	-.196	.038	-.363	-.352	1	-.124	-.178
	Sig. (2-tailed)	.483	.894	.184	.198		.660	.526
	N	15	15	15	15	15	15	15
Kedalaman	Pearson Correlation	-.524*	.736**	.002	.166	-.124	1	-.255
	Sig. (2-tailed)	.045	.002	.993	.554	.660		.360
	N	15	15	15	15	15	15	15
Substrat	Pearson Correlation	.220	-.309	-.464	-.014	-.178	-.255	1
	Sig. (2-tailed)	.430	.262	.081	.961	.526	.360	
	N	15	15	15	15	15	15	15

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Lampiran 4. Lanjutan

		Correlations						
		Suhu	Tutupan Lamun	Salinitas	Kekeruhan	Arus	Kedalaman	Substrat
Suhu	Pearson Correlation	1	.005	.421	.069	-.352	.166	-.014
	Sig. (2-tailed)		.985	.118	.806	.198	.554	.961
	N	15	15	15	15	15	15	15
Tutupan Lamun	Pearson Correlation	.005	1	-.067	-.693**	.038	.736**	-.309
	Sig. (2-tailed)	.985		.813	.004	.894	.002	.262
	N	15	15	15	15	15	15	15
Salinitas	Pearson Correlation	.421	-.067	1	.312	-.363	.002	-.464
	Sig. (2-tailed)	.118	.813		.258	.184	.993	.081
	N	15	15	15	15	15	15	15
Kekeruhan	Pearson Correlation	.069	-.693**	.312	1	-.196	-.524*	.220
	Sig. (2-tailed)	.806	.004	.258		.483	.045	.430
	N	15	15	15	15	15	15	15
Arus	Pearson Correlation	-.352	.038	-.363	-.196	1	-.124	-.178
	Sig. (2-tailed)	.198	.894	.184	.483		.660	.526
	N	15	15	15	15	15	15	15
Kedalaman	Pearson Correlation	.166	.736**	.002	-.524*	-.124	1	-.255
	Sig. (2-tailed)	.554	.002	.993	.045	.660		.360
	N	15	15	15	15	15	15	15
Substrat	Pearson Correlation	-.014	-.309	-.464	.220	-.178	-.255	1
	Sig. (2-tailed)	.961	.262	.081	.430	.526	.360	
	N	15	15	15	15	15	15	15

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Lampiran 4. Lanjutan

		Correlations						
		Arus	Tutupan Lamun	Salinitas	Kekeruhan	Suhu	Kedalaman	Substrat
Arus	Pearson Correlation	1	.038	-.363	-.196	-.352	-.124	-.178
	Sig. (2-tailed)		.894	.184	.483	.198	.660	.526
	N	15	15	15	15	15	15	15
Tutupan Lamun	Pearson Correlation	.038	1	-.067	-.693**	.005	.736**	-.309
	Sig. (2-tailed)	.894		.813	.004	.985	.002	.262
	N	15	15	15	15	15	15	15
Salinitas	Pearson Correlation	-.363	-.067	1	.312	.421	.002	-.464
	Sig. (2-tailed)	.184	.813		.258	.118	.993	.081
	N	15	15	15	15	15	15	15
Kekeruhan	Pearson Correlation	-.196	-.693**	.312	1	.069	-.524*	.220
	Sig. (2-tailed)	.483	.004	.258		.806	.045	.430
	N	15	15	15	15	15	15	15
Suhu	Pearson Correlation	-.352	.005	.421	.069	1	.166	-.014
	Sig. (2-tailed)	.198	.985	.118	.806		.554	.961
	N	15	15	15	15	15	15	15
Kedalaman	Pearson Correlation	-.124	.736**	.002	-.524*	.166	1	-.255
	Sig. (2-tailed)	.660	.002	.993	.045	.554		.360
	N	15	15	15	15	15	15	15
Substrat	Pearson Correlation	-.178	-.309	-.464	.220	-.014	-.255	1
	Sig. (2-tailed)	.526	.262	.081	.430	.961	.360	
	N	15	15	15	15	15	15	15

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Lampiran 4. Lanjutan

		Correlations						
		Kedalaman	Tutupan Lamun	Salinitas	Kekeruhan	Suhu	Arus	Substrat
Kedalaman	Pearson Correlation	1	.736**	.002	-.524*	.166	-.124	-.255
	Sig. (2-tailed)		.002	.993	.045	.554	.660	.360
	N	15	15	15	15	15	15	15
Tutupan Lamun	Pearson Correlation	.736**	1	-.067	-.693**	.005	.038	-.309
	Sig. (2-tailed)	.002		.813	.004	.985	.894	.262
	N	15	15	15	15	15	15	15
Salinitas	Pearson Correlation	.002	-.067	1	.312	.421	-.363	-.464
	Sig. (2-tailed)	.993	.813		.258	.118	.184	.081
	N	15	15	15	15	15	15	15
Kekeruhan	Pearson Correlation	-.524*	-.693**	.312	1	.069	-.196	.220
	Sig. (2-tailed)	.045	.004	.258		.806	.483	.430
	N	15	15	15	15	15	15	15
Suhu	Pearson Correlation	.166	.005	.421	.069	1	-.352	-.014
	Sig. (2-tailed)	.554	.985	.118	.806		.198	.961
	N	15	15	15	15	15	15	15
Arus	Pearson Correlation	-.124	.038	-.363	-.196	-.352	1	-.178
	Sig. (2-tailed)	.660	.894	.184	.483	.198		.526
	N	15	15	15	15	15	15	15
Substrat	Pearson Correlation	-.255	-.309	-.464	.220	-.014	-.178	1
	Sig. (2-tailed)	.360	.262	.081	.430	.961	.526	
	N	15	15	15	15	15	15	15

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Lampiran 4. Lanjutan

		Correlations						
		Substrat	Tutupan Lamun	Salinitas	Kekeruhan	Suhu	Arus	Kedalaman
Substrat	Pearson Correlation	1	-.309	-.464	.220	-.014	-.178	-.255
	Sig. (2-tailed)		.262	.081	.430	.961	.526	.360
	N	15	15	15	15	15	15	15
Tutupan Lamun	Pearson Correlation	-.309	1	-.067	-.693**	.005	.038	.736**
	Sig. (2-tailed)	.262		.813	.004	.985	.894	.002
	N	15	15	15	15	15	15	15
Salinitas	Pearson Correlation	-.464	-.067	1	.312	.421	-.363	.002
	Sig. (2-tailed)	.081	.813		.258	.118	.184	.993
	N	15	15	15	15	15	15	15
Kekeruhan	Pearson Correlation	.220	-.693**	.312	1	.069	-.196	-.524*
	Sig. (2-tailed)	.430	.004	.258		.806	.483	.045
	N	15	15	15	15	15	15	15
Suhu	Pearson Correlation	-.014	.005	.421	.069	1	-.352	.166
	Sig. (2-tailed)	.961	.985	.118	.806		.198	.554
	N	15	15	15	15	15	15	15
Arus	Pearson Correlation	-.178	.038	-.363	-.196	-.352	1	-.124
	Sig. (2-tailed)	.526	.894	.184	.483	.198		.660
	N	15	15	15	15	15	15	15
Kedalaman	Pearson Correlation	-.255	.736**	.002	-.524*	.166	-.124	1
	Sig. (2-tailed)	.360	.002	.993	.045	.554	.660	
	N	15	15	15	15	15	15	15

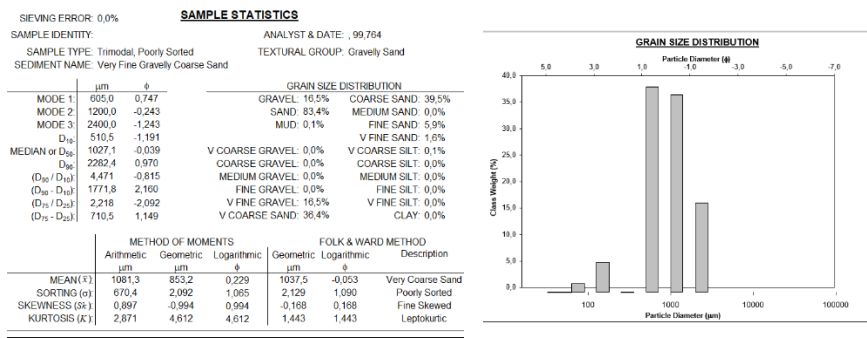
** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Lampiran 5. Pengukuran Besar Butir Sedimen Menggunakan Software *Gradi-stat*

Stasiun 1. Titik 1

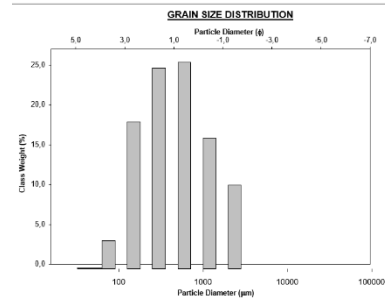
Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		16,422	16,461	16,461
1		36,348	36,434	52,895
0.5		39,357	39,450	92,345
0.25	100.03	0,006	0,006	92,351
0,125	8	5,91	5,924	98,275
0,063		1,627	1,631	99,906
<0.063		0,094	0,094	100,000
Total Berat Akhir		99,764	100,000	



Stasiun 1. Titik 2

Ukuran Butir Sedi- men (mm)	Berat Awal	Berat Sedimen	%Berat Sedimen	%Ku- mulatif
2		10,028	10,093	10,093
1		15,673	15,775	25,868
0.5		25,765	25,932	51,800
0.25	100.03	25,017	25,179	76,980
0,125	8	19,047	19,171	96,150
0,063		3,545	3,568	99,718
<0.063		0,28	0,282	100,000
Total Berat Akhir		99,355	100,000	

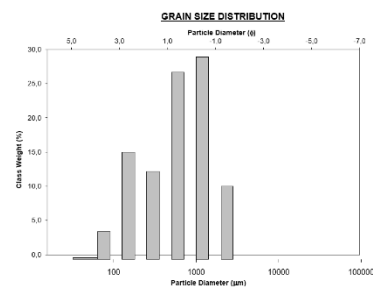
SAMPLE STATISTICS					
SIEVING ERROR: 0.0%					
SAMPLE IDENTITY: Sta 1, Titik 2		ANALYST & DATE: 99,355			
SAMPLE TYPE: Polymodal, Poorly Sorted			TEXTURAL GROUP: Gravelly Sand		
SEDIMENT NAME: Very Fine Gravelly Coarse Sand					
		GRAIN SIZE DISTRIBUTION			
MODE 1	605.0	0.747	GRAVEL: 10.1%	COARSE SAND: 25.9%	
MODE 2	302.5	1.747	SAND: 89.6%	MEDIUM SAND: 25.2%	
MODE 3	152.5	2.737	MUD: 0.3%	FINE SAND: 19.2%	
D ₁₀	140.5	-1.004		V FINE SAND: 3.6%	
MEDIAN or D ₅₀	512.3	0.965	V COARSE GRAVEL: 0.0%	V COARSE SILT: 0.3%	
D ₉₀	2006.2	2.831	COARSE GRAVEL: 0.0%	COARSE SILT: 0.0%	
(D ₉₀ / D ₁₀)	14.28	-2.819	MEDIUM GRAVEL: 0.0%	MEDIUM SILT: 0.0%	
(D ₇₅ - D ₂₅)	1865.7	3.836	FINE GRAVEL: 0.0%	FINE SILT: 0.0%	
(D ₇₅ / D ₂₅)	3.964	-73.401	V FINE GRAVEL: 10.1%	V FINE SILT: 0.0%	
(D ₇₅ - D ₂₅)	761.7	1.987	V COARSE SAND: 15.8%	CLAY: 0.0%	
		METHOD OF MOMENTS		FOLK & WARD METHOD	
	Arithmetic	Geometric	Logarithmic	Geometric	Logarithmic
	μm	μm	φ	μm	φ
MEAN (Σ)	696.7	453.6	1.140	463.5	1.109
SORTING (σ)	667.7	2.513	1.329	2.604	1.381
SKWESS (S ₃)	1.556	0.101	-0.101	-0.048	0.048
KURTOSIS (K)	4.471	2.265	2.265	0.869	0.869
					Description
					Medium Sand
					Poorly Sorted
					Symmetrical
					Platykurtic



Stasiun 1. Titik 3

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		10,221	10,293	10,293
1		28,308	28,507	38,800
0.5		27,241	27,432	66,232
0.25	100.04	12,826	12,916	79,148
0,125	1	16,224	16,338	95,486
0,063		4,127	4,156	99,643
<0.063		0,355	0,357	100,000
Total Berat Akhir		99,302	100,000	

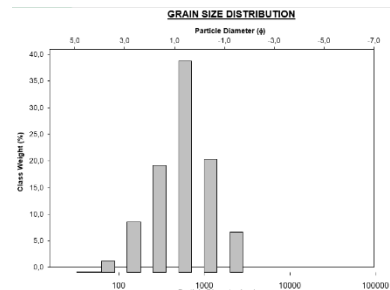
SAMPLE STATISTICS					
SIEVING ERROR: 0.0%					
SAMPLE IDENTITY: Sta 1, Titik 3		ANALYST & DATE: 99,302			
SAMPLE TYPE: Polymodal, Poorly Sorted			TEXTURAL GROUP: Gravelly Sand		
SEDIMENT NAME: Very Fine Gravelly Very Coarse Sand					
		GRAIN SIZE DISTRIBUTION			
MODE 1	1200.0	0.743	GRAVEL: 10.3%	COARSE SAND: 27.4%	
MODE 2	605.0	0.747	SAND: 89.4%	MEDIUM SAND: 12.9%	
MODE 3	152.5	2.737	MUD: 0.4%	FINE SAND: 16.3%	
D ₁₀	141.3	-1.014		V FINE SAND: 4.2%	
MEDIAN or D ₅₀	615.3	0.701	V COARSE GRAVEL: 0.0%	V COARSE SILT: 0.4%	
D ₉₀	2019.2	2.823	COARSE GRAVEL: 0.0%	COARSE SILT: 0.0%	
(D ₉₀ / D ₁₀)	14.29	-2.785	MEDIUM GRAVEL: 0.0%	MEDIUM SILT: 0.0%	
(D ₇₅ - D ₂₅)	1878.0	3.837	FINE GRAVEL: 0.0%	FINE SILT: 0.0%	
(D ₇₅ / D ₂₅)	4.206	-7.820	V FINE GRAVEL: 10.3%	V FINE SILT: 0.0%	
(D ₇₅ - D ₂₅)	897.1	2.073	V COARSE SAND: 28.5%	CLAY: 0.0%	
		METHOD OF MOMENTS		FOLK & WARD METHOD	
	Arithmetic	Geometric	Logarithmic	Geometric	Logarithmic
	μm	μm	φ	μm	φ
MEAN (Σ)	822.4	554.1	0.852	506.7	0.981
SORTING (σ)	986.8	2.581	1.368	2.632	1.396
SKWESS (S ₃)	1.120	0.402	0.402	-0.179	0.179
KURTOSIS (K)	3.565	2.287	2.287	0.837	0.837
					Description
					Coarse Sand
					Poorly Sorted
					Fine Skewed
					Platykurtic



Stasiun 2. Titik 1

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		7,258	7,255	7,255
1		20,501	20,493	27,748
0.5		39,921	39,905	67,653
0.25	100.00	20,199	20,191	87,844
0,125	4	9,921	9,917	97,761
0,063		2,146	2,145	99,906
<0.063		0,094	0,094	100,000
Total Berat Akhir		100,04	100,000	

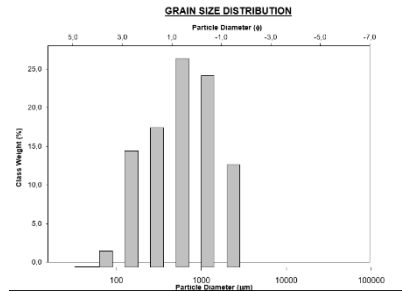
SAMPLE STATISTICS						
SIEVING ERROR: 0.0%						
SAMPLE IDENTITY: Sta 2. Titik 1						
ANALYST & DATE: , 100.04						
SAMPLE TYPE: Polymodal, Poorly Sorted						
TEXTURAL GROUP: Gravelly Sand						
SEDIMENT NAME: Very Fine Gravelly Coarse Sand						
GRAIN SIZE DISTRIBUTION						
MODE 1	605.0	0.747	GRAVEL: 7.3%	COARSE SAND: 39.9%		
MODE 2	1200.0	-0.243	SAND: 52.7%	MEDIUM SAND: 20.2%		
MODE 3	3025.5	1.747	MUD: 0.1%	FINE SAND: 9.9%		
D ₁₀	166.3	-0.420		V FINE SAND: 2.1%		
MEDIAN or D ₅₀	583.9	0.776	V COARSE GRAVEL: 0.0%	V COARSE SILT: 0.1%		
D ₆₀	1338.3	2.588	COARSE GRAVEL: 0.0%	COARSE SILT: 0.0%		
(D ₆₀ / D ₁₀)	8.048	-6.157	MEDIUM GRAVEL: 0.0%	MEDIUM SILT: 0.0%		
(D ₉₀ - D ₁₀)	1172.0	3.009	FINE GRAVEL: 0.0%	FINE SILT: 0.0%		
(D ₇₅ / D ₂₅)	3.348	-25.782	V FINE GRAVEL: 7.3%	V FINE SILT: 0.0%		
(D ₇₅ - D ₂₅)	733.7	1.743	V COARSE SAND: 20.5%	CLAY: 0.0%		
METHOD OF MOMENTS						
FOLK & WARD METHOD						
	Arithmetic	Geometric	Logarithmic	Description		
MEAN (M)	739.3	546.4	0.867	574.1	0.601	Coarse Sand
SORTING (σ)	577.3	2.186	1.128	2.223	1.152	Poorly Sorted
SKEWNESS (S _K)	1.800	-0.280	0.260	-0.035	0.035	Symmetrical
KURTOSIS (K _S)	5.262	2.894	2.894	0.941	0.941	Mesokurtic



Stasiun 2. Titik 2

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		12,819	12,807	12,807
1		23,916	23,894	36,702
0.5		27,2	27,175	63,877
0.25	100,09	18,177	18,160	82,037
0,125	3	15,743	15,729	97,766
0,063		2,127	2,125	99,891
<0.063		0,109	0,109	100,000
Total Berat Akhir		100,091	100,000	

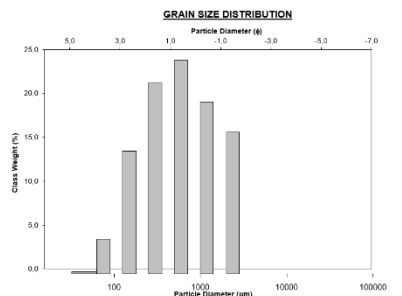
SIEVING ERROR: 0.0%		SAMPLE STATISTICS		ANALYST & DATE: 100.091	
SAMPLE IDENTITY: Sta 2 Titik 2		TEXTURAL GROUP: Gravelly Sand			
SAMPLE TYPE: Polymodal, Poorly Sorted		SEDIMENT NAME: Very Fine Gravelly Coarse Sand			
		GRAIN SIZE DISTRIBUTION			
MODE 1	605.0 0.747	GRAVEL: 12.6%	COARSE SAND: 27.2%		
MODE 2	1200.0 0.243	SAND: 87.1%	MEDIUM SAND: 18.2%		
MODE 3	302.5 1.747	MUD: 0.1%	FINE SAND: 15.7%		
D ₁₀	149.7 -1.108	V COARSE GRAVEL: 0.0%	V COARSE SILT: 0.1%		
MEDIAN of D ₅₀	598.0 0.742	COARSE GRAVEL: 0.0%	COARSE SILT: 0.0%		
D ₅₀	2153.1 2.740	MEDIUM GRAVEL: 0.0%	MEDIUM SILT: 0.0%		
(D ₉₀ / D ₁₀)	14.39 -2.477	FINE GRAVEL: 0.0%	FINE SILT: 0.0%		
(D ₇₅ / D ₂₅)	2003.4 3.847	V FINE GRAVEL: 12.6%	V FINE SILT: 0.0%		
(D ₇₅ / D ₂₅)	4.117 -7.588	V COARSE SAND: 23.9%	CLAY: 0.0%		
(D ₇₅ - D ₂₅)	892.7 2.042				
		METHOD OF MOMENTS		FOLK & WARD METHOD	
	Arithmetic	Geometric	Logarithmic	Geometric	Logarithmic
	μm	μm	φ	μm	φ
MEAN (X)	839.1	567.3	0.818	516.4	0.954
SORTING (σ)	705.4	2.486	1.321	2.597	1.377
SKEWNESS (σ ₃)	1.156	-0.187	0.187	-0.123	0.123
KURTOSIS (K ₄)	3.324	2.170	2.170	0.844	0.844
					Description
					Coarse Sand
					Poorly Sorted
					Fine Skewed
					Platykurtic



Stasiun 2. Titik 3

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		15,53	15,560	15,560
1		18,848	18,884	34,444
0.5		24,438	24,485	58,929
0.25	100,06	21,874	21,916	80,844
0,125	5	14,596	14,624	95,468
0,063		4,051	4,059	99,527
<0.063		0,472	0,473	100,000
Total Berat Akhir		99,809	100,000	0

SIEVING ERROR: 0.0%		SAMPLE STATISTICS		ANALYST & DATE: 99.809	
SAMPLE IDENTITY: Sta 2 Titik 3		TEXTURAL GROUP: Gravelly Sand			
SAMPLE TYPE: Polymodal, Poorly Sorted		SEDIMENT NAME: Very Fine Gravelly Coarse Sand			
		GRAIN SIZE DISTRIBUTION			
MODE 1	605.0 0.747	GRAVEL: 15.6%	COARSE SAND: 24.5%		
MODE 2	302.5 1.747	SAND: 84.0%	MEDIUM SAND: 21.9%		
MODE 3	1200.0 0.243	MUD: 0.5%	FINE SAND: 14.0%		
D ₁₀	143.3 -1.173	V COARSE GRAVEL: 0.0%	V COARSE SILT: 0.5%		
MEDIAN of D ₅₀	568.2 0.816	COARSE GRAVEL: 0.0%	COARSE SILT: 0.0%		
D ₅₀	2255.5 2.803	MEDIUM GRAVEL: 0.0%	MEDIUM SILT: 0.0%		
(D ₉₀ / D ₁₀)	15.74 -2.389	FINE GRAVEL: 0.0%	FINE SILT: 0.0%		
(D ₇₅ / D ₂₅)	2112.2 3.977	V FINE GRAVEL: 15.6%	V FINE SILT: 0.0%		
(D ₇₅ / D ₂₅)	4.310 -7.683	V COARSE SAND: 18.9%	CLAY: 0.0%		
(D ₇₅ - D ₂₅)	908.7 2.108				
		METHOD OF MOMENTS		FOLK & WARD METHOD	
	Arithmetic	Geometric	Logarithmic	Geometric	Logarithmic
	μm	μm	φ	μm	φ
MEAN (X)	840.1	536.1	0.899	508.3	0.976
SORTING (σ)	758.8	2.667	1.415	2.674	1.419
SKEWNESS (σ ₃)	1.131	-0.129	0.129	-0.081	0.081
KURTOSIS (K ₄)	2.992	2.184	2.184	0.839	0.839
					Description
					Coarse Sand
					Poorly Sorted
					Symmetrical
					Platykurtic



Stasiun 3. Titik 1

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		6,225	6,220	6,220
1		18,262	18,247	24,466
0.5		25,286	25,265	49,731
0.25	100.08	31,172	31,146	80,877
0,125	4	15,355	15,342	96,219
0,063		2,476	2,474	98,693
<0.063		1,308	1,307	100,000
Total Berat Akhir		100,084	100,000	

SIEVING ERROR: 0.0% **SAMPLE STATISTICS**

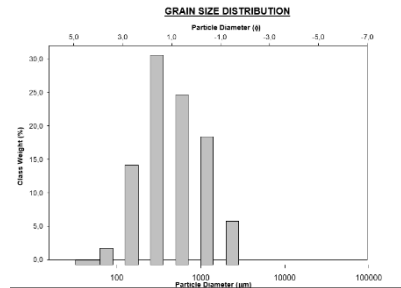
SAMPLE IDENTITY: **Sta 3. Titik 1** ANALYST & DATE: 100,084

SAMPLE TYPE: Polymodal, Poorly Sorted TEXTURAL GROUP: Gravelly Sand

SEDIMENT NAME: Very Fine Gravelly Medium Sand

	μ_m	ϕ	GRAIN SIZE DISTRIBUTION	
MODE 1:	302.5	1.747	GRAVEL: 6.2%	COARSE SAND: 25.3%
MODE 2:	605.0	0.747	SAND: 92.5%	MEDIUM SAND: 31.1%
MODE 3:	1200.0	-0.243	MUD: 1.3%	FINE SAND: 15.3%
D_{10}	144.9	-0.385		V FINE SAND: 2.5%
MEDIAN or D_{50}	353.9	1.498	V COARSE GRAVEL: 0.0%	V COARSE SILT: 1.3%
D_{60}	1305.7	2.787	COARSE GRAVEL: 0.0%	COARSE SILT: 0.0%
(D_{60} / D_{10})	9.011	7.241	MEDIUM GRAVEL: 0.0%	MEDIUM SILT: 0.0%
$(D_{30} - D_{10})$	1160.8	3.172	FINE GRAVEL: 0.0%	FINE SILT: 0.0%
(D_{75} / D_{25})	2.639	3.773	V FINE GRAVEL: 6.2%	V FINE SILT: 0.0%
$(D_{75} - D_{25})$	437.7	1.400	V COARSE SAND: 18.2%	CLAY: 0.0%

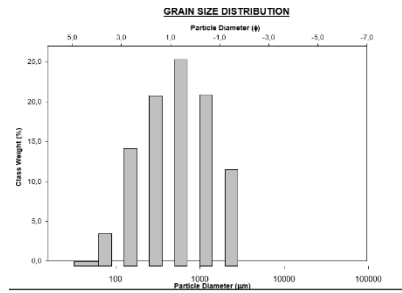
	METHOD OF MOMENTS			FOLK & WARD METHOD		
	Arithmetic μ_m	Geometric μ_m	Logarithmic ϕ	Geometric μ_m	Logarithmic ϕ	Description
MEAN (\bar{x})	641.2	440.7	1.182	410.4	1.285	Medium Sand
SORTING (σ)	578.4	2.375	1.248	2.489	1.316	Poorly Sorted
SKEWNESS (β_1)	1.721	-0.039	0.039	0.254	-0.254	Coarse Skewed
KURTOSIS (β_2)	5.027	2.651	2.651	1.187	1.187	Leptokurtic



Stasiun 3. Titik 2

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		11,565	11,611	11,611
1		20,517	20,599	32,210
0.5		25,786	25,889	58,099
0.25	100,06	21,256	21,341	79,439
0,125	2	15,277	15,338	94,777
0,063		4,167	4,184	98,961
<0.063		1,035	1,039	100,000
Total Berat Akhir		99,603	100,000	

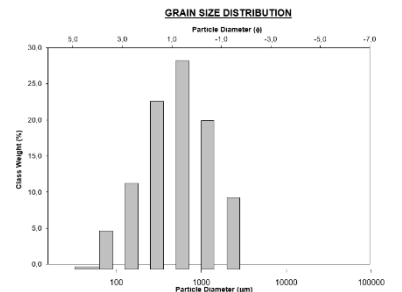
SAMPLE STATISTICS			
SIEVING ERROR: 0.0%			
SAMPLE IDENTITY: Sta 3. Titik 2 ANALYST & DATE: , 99,803			
SAMPLE TYPE: Polymodal, Poorly Sorted TEXTURAL GROUP: Gravelly Sand			
SEDIMENT NAME: Very Fine Gravelly Coarse Sand			
GRAIN SIZE DISTRIBUTION			
MODE 1	605.0 0.747	GRAVEL: 11.8%	COARSE SAND: 25.9%
MODE 2	1200.0 -0.243	SAND: 87.4%	MEDIUM SAND: 21.3%
MODE 3	302.5 1.747	MUD: 1.0%	FINE SAND: 15.3%
D ₁₀	140.0 -1.007	V COARSE GRAVEL: 0.0%	V COARSE SILT: 1.0%
MEDIAN or D ₅₀	558.0 0.842	COARSE GRAVEL: 0.0%	COARSE SILT: 0.0%
D ₆₀	2095.0 2.836	MEDIUM GRAVEL: 0.0%	MEDIUM SILT: 0.0%
(D ₆₀ / D ₁₀)	14.96 2.957	FINE GRAVEL: 0.0%	FINE SILT: 0.0%
(D ₃₀ - D ₁₀)	1955.6 3.904	V FINE GRAVEL: 11.8%	V FINE SILT: 0.0%
(D ₇₅ / D ₂₅)	4.183 -1.152	V COARSE SAND: 20.8%	CLAY: 0.0%
(D ₇₅ - D ₂₅)	850.1 2.065		
METHOD OF MOMENTS		FOLK & WARD METHOD	
	Arithmetic Geometric Logarithmic	Geometric Logarithmic	Description
MEAN (x̄)	774.1 502.0 0.994	489.7 1.030	Medium Sand
SORTING (σ)	696.9 2.625 1.362	2.784 1.477	Poorly Sorted
SKWENESS (sr)	1.295 -0.187 0.187	-0.150 0.150	Fine Skewed
KURTOSIS (K)	3.687 2.329 2.329	0.948 0.948	Mesokurtic



Stasiun 3. Titik 3

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		9,528	9,539	9,539
1		19,74	19,762	29,301
0.5		28,952	28,984	58,285
0.25	100,07	23,236	23,262	81,547
0,125	4	12,404	12,418	93,964
0,063		5,389	5,395	99,359
<0.063		0,64	0,641	100,000
Total Berat Akhir		99,889	100,000	

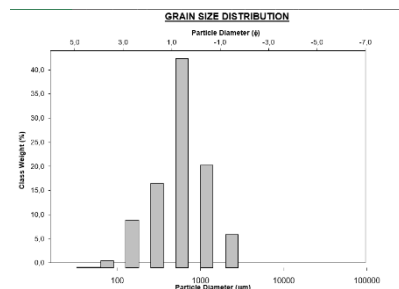
SAMPLE STATISTICS			
SIEVING ERROR: 0.0%			
SAMPLE IDENTITY: Sta 3. Titik 3 ANALYST & DATE: , 99,889			
SAMPLE TYPE: Polymodal, Poorly Sorted TEXTURAL GROUP: Gravelly Sand			
SEDIMENT NAME: Very Fine Gravelly Coarse Sand			
GRAIN SIZE DISTRIBUTION			
MODE 1	605.0 0.747	GRAVEL: 9.5%	COARSE SAND: 29.0%
MODE 2	302.5 1.747	SAND: 89.8%	MEDIUM SAND: 23.3%
MODE 3	1200.0 -0.243	MUD: 0.6%	FINE SAND: 12.4%
D ₁₀	140.0 0.474	V FINE SAND: 5.4%	V COARSE SILT: 0.6%
MEDIAN or D ₅₀	552.7 0.855	V COARSE GRAVEL: 0.0%	V COARSE SILT: 0.6%
D ₆₀	1389.0 2.832	COARSE GRAVEL: 0.0%	COARSE SILT: 0.0%
(D ₆₀ / D ₁₀)	9.891 -5.974	MEDIUM GRAVEL: 0.0%	MEDIUM SILT: 0.0%
(D ₃₀ - D ₁₀)	1248.6 3.306	FINE GRAVEL: 0.0%	FINE SILT: 0.0%
(D ₇₅ / D ₂₅)	3.899 -17.886	V FINE GRAVEL: 9.5%	V FINE SILT: 0.0%
(D ₇₅ - D ₂₅)	800.0 1.263	V COARSE SAND: 19.8%	CLAY: 0.0%
METHOD OF MOMENTS		FOLK & WARD METHOD	
	Arithmetic Geometric Logarithmic	Geometric Logarithmic	Description
MEAN (x̄)	735.2 491.0 1.026	487.8 1.036	Medium Sand
SORTING (σ)	651.3 2.526 1.337	2.740 1.454	Poorly Sorted
SKWENESS (sr)	1.443 -0.216 0.216	-0.159 0.159	Fine Skewed
KURTOSIS (K)	4.315 2.494 2.494	1.003 1.003	Mesokurtic



Stasiun 4. Titik 1

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		6,64	6,638	6,638
1		20,456	20,448	27,086
0.5		43,494	43,478	70,564
0.25	100,07	17,536	17,530	88,093
0,125	2	10,334	10,330	98,424
0,063		1,467	1,466	99,890
<0.063		0,11	0,110	100,000
Total Berat Akhir		100,037	100,000	

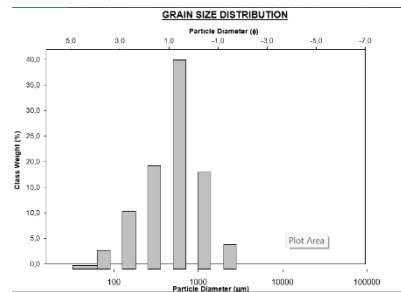
SAMPLE STATISTICS						
SIEVING ERROR: 0.0%						
SAMPLE IDENTITY: Sta 4. Titik 1		ANALYST & DATE: 100.037				
SAMPLE TYPE: Polymodal, Poorly Sorted		TEXTURAL GROUP: Gravelly Sand				
SEDIMENT NAME: Very Fine Gravelly Coarse Sand						
	μ	σ	GRAIN SIZE DISTRIBUTION			
MODE 1:	605.0	0.747	GRAVEL: 6.6%	COARSE SAND: 43.5%		
MODE 2:	1200.0	-0.243	SAND: 93.3%	MEDIUM SAND: 17.5%		
MODE 3:	302.5	1.747	MUD: 0.1%	FINE SAND: 10.3%		
D ₁₀ :	198.3	-0.406	V COARSE GRAVEL: 0.0%	V FINE SAND: 1.5%		
MEDIAN or D ₅₀ :	592.2	0.701	COARSE GRAVEL: 0.0%	COARSE SILT: 0.1%		
D ₆₀ :	1324.6	2.571	MEDIUM GRAVEL: 0.0%	MEDIUM SILT: 0.0%		
(D ₆₀ / D ₁₀):	7.871	-6.339	FINE GRAVEL: 0.0%	FINE SILT: 0.0%		
(D ₃₀ - D ₁₀):	1156.4	2.977	V FINE GRAVEL: 6.6%	V FINE SILT: 0.0%		
(D ₃₀ / D ₁₀):	3.180	-32.758	V COARSE SAND: 20.4%	CLAY: 0.0%		
(D ₇₅ - D ₂₅):	710.1	1.672				
	METHOD OF MOMENTS		FOLK & WARD METHOD			
	Arithmetic	Geometric	Logarithmic	Description		
	μ	μ	σ			
MEAN (x̄):	737.7	558.1	0.841	577.1	0.793	Coarse Sand
SORTING (σ):	557.0	2.126	1.088	2.195	1.134	Poorly Sorted
SKEWNESS (s _k):	1.645	-0.294	0.294	0.046	0.046	Symmetrical
KURTOSIS (k _k):	5.586	2.995	2.995	0.967	0.967	Mesokurtic



Stasiun 4. Titik 2

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		4,545	4,544	4,544
1		18,041	18,035	22,579
0.5		40,676	40,663	63,241
0.25	100,03	20,101	20,094	83,335
0,125	3	11,696	11,692	95,028
0,063		3,63	3,629	98,656
<0.063		1,344	1,344	100,000
Total Berat Akhir		100,033	100,000	

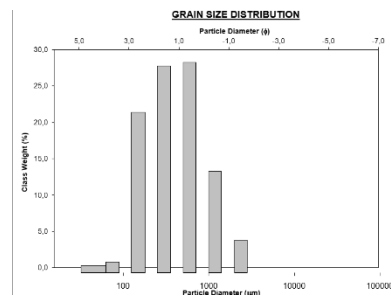
SIEVING ERROR: 0.0%		SAMPLE STATISTICS	
SAMPLE IDENTITY: Sta 4, Titik 2		ANALYST & DATE: 100,033	
SAMPLE TYPE: Polymodal, Poorly Sorted		TEXTURAL GROUP: Slightly Gravelly Sand	
SEDIMENT NAME: Slightly Very Fine Gravelly Coarse Sand			
		GRAIN SIZE DISTRIBUTION	
MODE 1	µm φ	GRAVEL: 4.5%	COARSE SAND: 40.7%
MODE 2	302.5 1,747	SAND: 94.1%	MEDIUM SAND: 20.1%
MODE 3	1200.0 -0.243	MUD: 1.3%	FINE SAND: 11.7%
D ₁₀	149.2 -0.359	V COARSE GRAVEL: 0.0%	V FINE SAND: 3.0%
MEDIAN or D ₅₀	589.5 0.826	COARSE GRAVEL: 0.0%	V COARSE SILT: 1.2%
D ₉₀	1264.5 2,774	MEDIUM GRAVEL: 0.0%	MEDIUM SILT: 0.0%
(D ₉₀ / D ₁₀)	8,648 -8,193	FINE GRAVEL: 0.0%	FINE SILT: 0.0%
(D ₉₀ - D ₁₀)	1118.3 3,112	V FINE GRAVEL: 4.5%	V FINE SILT: 0.0%
(D ₇₅ / D ₂₅)	2,405 3,415	V COARSE SAND: 18.0%	CLAY: 0.0%
(D ₇₅ - D ₂₅)	406.2 1,266		
METHOD OF MOMENTS		FOLK & WARD METHOD	
	Arithmetic Geometric Logarithmic φ	Geometric Logarithmic φ	Description
MEAN (x̄)	µm µm	µm φ	
SORTING (σ)	514.3 2,288 1,070	481.6 1,054	Medium Sand
SKEWNESS (S _k)	1,750 -0,490 0,450	-0,246 0,246	Poorly Sorted
KURTOSIS (K _t)	6,503 3,154 3,154	1,124	Fine Skewed Leptokurtic



Stasiun 4. Titik 3

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		4,218	4,226	4,226
1		13,18	13,206	17,432
0.5		28,467	28,523	45,955
0.25	100,07	27,985	28,040	73,994
0,125	6	22,622	22,666	96,660
0,063		1,478	1,481	98,141
<0.063		1,855	1,859	100,000
Total Berat Akhir		99,805	100,000	

SIEVING ERROR: 0.0%		SAMPLE STATISTICS	
SAMPLE IDENTITY: Sta 4, Titik 3		ANALYST & DATE: 99,605	
SAMPLE TYPE: Polymodal, Poorly Sorted		TEXTURAL GROUP: Slightly Gravelly Sand	
SEDIMENT NAME: Slightly Very Fine Gravelly Coarse Sand			
		GRAIN SIZE DISTRIBUTION	
MODE 1	µm φ	GRAVEL: 4.2%	COARSE SAND: 28.5%
MODE 2	302.5 1,747	SAND: 93.9%	MEDIUM SAND: 28.0%
MODE 3	152.5 2,737	MUD: 1.6%	FINE SAND: 22.7%
D ₁₀	139.1 -0,273	V FINE SAND: 1.5%	
MEDIAN or D ₅₀	337.5 1,567	V COARSE GRAVEL: 0.0%	V COARSE SILT: 1.8%
D ₉₀	1208.5 2,845	COARSE GRAVEL: 0.0%	COARSE SILT: 0.0%
(D ₉₀ / D ₁₀)	8,685 -10,415	MEDIUM GRAVEL: 0.0%	MEDIUM SILT: 0.0%
(D ₉₀ - D ₁₀)	1069.3 3,119	FINE GRAVEL: 0.0%	FINE SILT: 0.0%
(D ₇₅ / D ₂₅)	3,653 3,974	V FINE GRAVEL: 4.2%	V FINE SILT: 0.0%
(D ₇₅ - D ₂₅)	469.8 1,809	V COARSE SAND: 13.2%	CLAY: 0.0%
METHOD OF MOMENTS		FOLK & WARD METHOD	
	Arithmetic Geometric Logarithmic φ	Geometric Logarithmic φ	Description
MEAN (x̄)	µm µm	µm φ	
SORTING (σ)	553.9 385.0 1,377	377.1 1,467	Medium Sand
SKEWNESS (S _k)	512.1 2,316 1,212	2,310 1,208	Poorly Sorted
KURTOSIS (K _t)	2,073 0,035 -0,035	0,179 -0,179	Coarse Skewed
	7,601 2,736 2,736	0,750 0,750	Platykurtic



Stasiun 5. Titik 1

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		3,695	3,694	3,694
1		15,352	15,347	19,040
0.5		33,144	33,132	52,173
0.25	100,06	23,049	23,041	75,214
0,125	1	15,556	15,551	90,764
0,063		5,03	5,028	95,792
<0.063		4,209	4,208	100,000
Total Berat Akhir		100,035	100,000	

SIEVING ERROR: 0.0%

SAMPLE STATISTICS

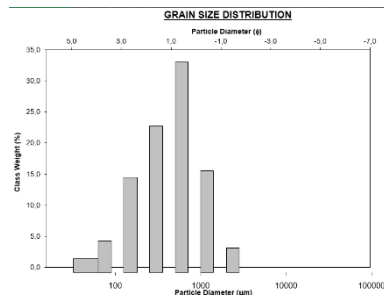
SAMPLE IDENTITY: Sta 5. Titik 1 ANALYST & DATE: , 100.035

SAMPLE TYPE: Polymodal, Poorly Sorted TEXTURAL GROUP: Slightly Gravely Sand

SEDIMENT NAME: Slightly Very Fine Gravely Coarse Sand

		GRAIN SIZE DISTRIBUTION	
	μm	ϕ	
MODE 1:	605.0	0.747	GRAVEL: 3.7%
MODE 2:	302.5	1.747	COARSE SAND: 33.1%
MODE 3:	1200.0	-0.243	SAND: 92.1%
			MEDIUM SAND: 23.0%
D ₁₀	127.3	-0.286	MUD: 4.2%
			FINE SAND: 15.6%
D ₅₀	511.6	0.967	V COARSE GRAVEL: 0.0%
			V COARSE SILT: 4.2%
D ₉₀	1219.2	2.974	COARSE GRAVEL: 0.0%
			COARSE SILT: 0.0%
(D ₉₀ / D ₁₀)	9.580	-10.401	MEDIUM GRAVEL: 0.0%
			MEDIUM SILT: 0.0%
(D ₉₀ - D ₁₀)	1092.0	3.250	FINE GRAVEL: 0.0%
			FINE SILT: 0.0%
(D ₇₅ / D ₂₅)	2.858	3.410	V FINE GRAVEL: 3.7%
			V FINE SILT: 0.0%
(D ₇₅ - D ₂₅)	415.8	1.410	V COARSE SAND: 15.3%
			CLAY: 0.0%

METHOD OF MOMENTS			FOLK & WARD METHOD			
	μm	ϕ	μm	ϕ	Description	
MEAN (1)	572.5	367.3	1.369	431.1	1.214	Medium Sand
SORTING (2)	502.3	2,528	1,338	2,596	1,376	Poorly Sorted
SKEWNESS (3)	1,855	0,401	0,401	0,305	0,305	Very Fine Skewed
KURTOSIS (4)	7,037	2,702	2,762	1,265	1,265	Leplokurtic



Stasiun 5. Titik 2

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		3,432	3,433	3,433
1		9,18	9,184	12,617
0.5		31,345	31,358	43,975
0.25	100,06	20,687	20,696	64,671
0,125	0	25,436	25,447	90,118
0,063		7,037	7,040	97,158
<0.063		2,841	2,842	100,000
Total Berat Akhir		99,958	100,000	

SEIVING ERROR: 0.0%

SAMPLE STATISTICS

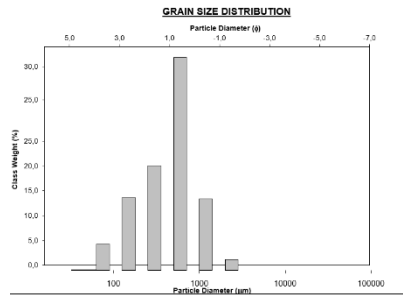
SAMPLE IDENTITY: **Sta 5, Titik 2** ANALYST & DATE: 99.958

SAMPLE TYPE: Polymodal, Poorly Sorted TEXTURAL GROUP: Slightly Gravelly Sand

SEDIMENT NAME: Slightly Very Fine Gravelly Coarse Sand

	METHOD OF MOMENTS			FOLK & WARD METHOD		
	Arithmetic µm	Geometric µm	Logarithmic φ	Geometric µm	Logarithmic φ	Description
MEAN(µ)	490.5	326.0	1.617	310.4	1.688	Medium Sand
SORTING (σ)	479.1	2.473	1.306	2.334	1.223	Poorly Sorted
SKWNESS (sk)	2.306	-0.039	0.039	-0.047	0.047	Symmetrical
KURTOSIS (k)	9.233	2.504	2.504	0.670	0.670	Platykurtic

GRAIN SIZE DISTRIBUTION			
MODE 1	605.0	0.747	GRAVEL: 3.4%
MODE 2	152.5	2.737	SAND: 93.8%
MODE 3	302.5	1.747	MUD: 2.8%
D ₁₀	125.2	-0.138	V FINE SAND: 7.1%
MEDIAN or D ₅₀	320.6	1.641	V COARSE SILT: 2.8%
D ₆₀	1100.6	2.988	COARSE GRAVEL: 0.0%
(D ₃₀ / D ₁₀)	8.799	-21.668	COARSE SILT: 0.0%
(D ₃₀ - D ₁₀)	975.4	3.139	MEDIUM GRAVEL: 0.0%
(D ₇₅ / D ₂₅)	3.982	3.873	MEDIUM SILT: 0.0%
(D ₇₅ - D ₂₅)	463.0	1.994	V FINE GRAVEL: 3.4%
			V FINE SILT: 0.0%
			V COARSE SAND: 9.2%
			CLAY: 0.0%



Stasiun 5. Titik 3

Ukuran Butir Sedimen (mm)	Berat Awal	Berat Akhir Sedimen	%Berat Sedimen	%Kumulatif
2		2,067	2,081	2,081
1		13,633	13,722	15,803
0.5		42,414	42,692	58,495
0.25	100,05	20,861	20,998	79,493
0,125	4	15,024	15,123	94,616
0,063		5,27	5,305	99,920
<0.063		0,079	0,080	100,000
Total Berat Akhir		99,348	100,000	

SEIVING ERROR: 0.0%

SAMPLE STATISTICS

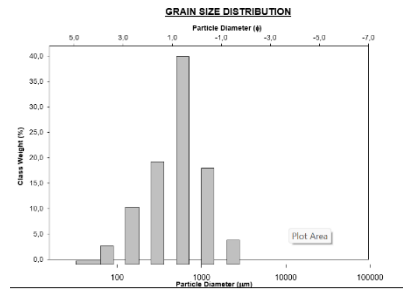
SAMPLE IDENTITY: **Sta 5, Titik 3** ANALYST & DATE: 99.348

SAMPLE TYPE: Polymodal, Poorly Sorted TEXTURAL GROUP: Slightly Gravelly Sand

SEDIMENT NAME: Slightly Very Fine Gravelly Coarse Sand

	METHOD OF MOMENTS			FOLK & WARD METHOD		
	Arithmetic µm	Geometric µm	Logarithmic φ	Geometric µm	Logarithmic φ	Description
MEAN(µ)	983.8	422.8	1.242	594.4	1.342	Medium Sand
SORTING (σ)	423.3	2.180	1.124	2.179	1.123	Poorly Sorted
SKWNESS (sk)	1.896	-0.392	0.382	-0.482	0.482	Very Fine Skewed
KURTOSIS (k)	8.335	2.740	2.740	1.238	1.238	Leptokurtic

GRAIN SIZE DISTRIBUTION			
MODE 1	605.0	0.747	GRAVEL: 2.1%
MODE 2	302.5	1.747	COARSE SAND: 42.7%
MODE 3	152.5	2.737	SAND: 97.8%
D ₁₀	139.7	0.205	MUD: 0.1%
MEDIAN or D ₅₀	536.1	0.899	FINE SAND: 15.1%
D ₆₀	1152.9	2.839	V FINE SAND: 5.3%
(D ₃₀ / D ₁₀)	8.252	-13.832	V COARSE GRAVEL: 0.0%
(D ₃₀ - D ₁₀)	1013.2	3.045	V COARSE SILT: 0.1%
(D ₇₅ / D ₂₅)	2.443	3.137	COARSE GRAVEL: 0.0%
(D ₇₅ - D ₂₅)	388.9	1.289	COARSE SILT: 0.0%
			MEDIUM GRAVEL: 0.0%
			MEDIUM SILT: 0.0%
			FINE GRAVEL: 0.0%
			FINE SILT: 0.0%
			V FINE GRAVEL: 2.1%
			V FINE SILT: 0.0%
			V COARSE SAND: 13.7%
			CLAY: 0.0%



Lampiran 6. Dokumentasi Pengambilan Data Di Lapangan

(a) : Pengukuran Kecepatan Arus; (b). Pengambilan sampel substrat; (c). Pengukuran Suhu; (d). Identifikasi Lamun

Lampiran 7. Dokumentasi Analisis Di Laboratorium



(a).Pengukuran salinitas; (b). Pengayakan sampel sedimen; (c). Penumbukan sampel sedimen setelah oven; (d). Proses penimbangan sampel sedimen; (e). Pengukuran nilai kekeruhan

Lampiran 8. Tim Lapangan