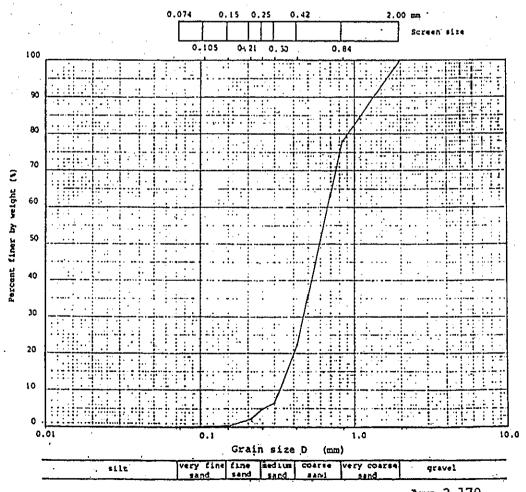
Sample No.	100 . A	Date	
Name of sampl	D 3 1 D	 Signature	
Locality	Sanur Beac	 	

Grain size (mm)	Weight (g)	Weight (%)
		<b>.</b>
2.00		100
0.84	43.75	78.125
0.42	111.50	22.375
0.30	31.55	6.6
0.25	3.15	5.025
0.21	5.55	2,25
0.15	4.20	0.15
0.105	0.25	0.025
0.074	0.05	0
	0	. =

Very coarse sand (2.00-0.84mm) €	21.875
Coarse sand (0.84-0.42mm) %	55.75
Medium sand (0.42-0.25mm) \	17.35
Fine sand (0.25-0.15mm) *	4.875
Very fine sand (0.15-0.074mm) *	0.15
Silt or clay (under 0.074mm)	0
Maximum grain size mm	0.84
60% grain size mm	0.67
301 grain size mm	0.47
10% grain size mm	0.32
Coefficient of uniformity Uc	2.094
Coefficient of curvature Uc'	1.030
<del> </del>	4

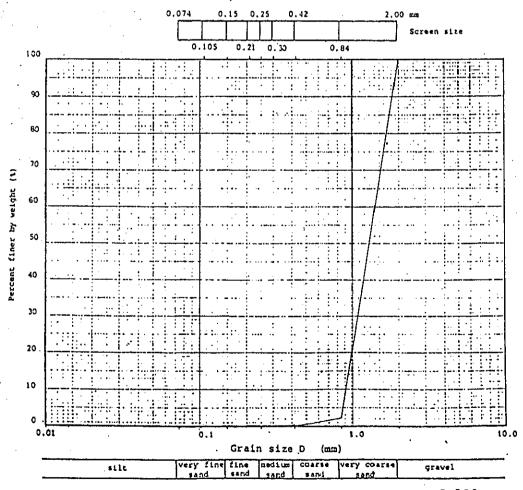


App.3.179

	Grain Size Analysis	
 Sample No.	100 B	Pate
Name of sample _	Bali Beach Sand	Signature
Locality	Sanur Beach	

Grain size (mm)	Weight (g)	Weight (%) percent
2,00		100
0.84	195.45	2,275
0.42	4.35	0.10
0.30	0.20	0
0.25	0	00
0.21	0	00
0.15	<u> </u> 0	0
0.105	Q	Lo
0.074	0	0
	0	_

sand	(2.00-	0.84mm) 1	97.725
sand	(0.84-	0.42mm) \	2.175
sand	(0.42-	0.25mm) \	. 0.10
sand	(0.25~	0.15mm) \	0
sand	(0.15-	0.074mm) •	0
lay	(under 0	.074mm) <b>\</b>	0 .
in size	2 020		0.84
in size	9 05.00		1.4
in size	• man		1,10
in size	3 DADS		0.91
of uni	lformity	Ų¢	1.538
of cu	vature	Uci	0.950
	sand sand sand sand lay in size in size in size of un	sand (0.84-1 sand (0.42-1 sand (0.25-1 sand (0.15-1 lay (under 0 in size mm in size mm in size mm of uniformity	sand (0.84-0.42mm) % sand (0.42-0.25mm) % sand (0.25-0.15mm) % sand (0.15-0.074mm) % lay (under 0.074mm) % in size mm in size mm in size mm

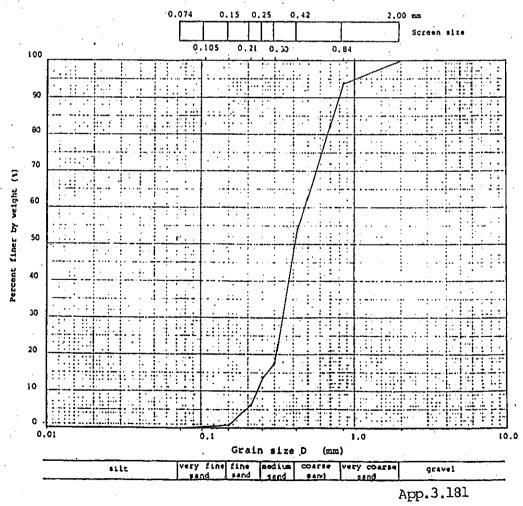


App.3.180

Sample No.	101 A	Date
Name of sample	n t - g - u d	Signature
Locality	Sanur Beach	

Grain size (mm)	Weight (g)	Weight (%)
2.00		100
0.84	12,40	93.8
0.42	79.45	54.075
0,30	72.80	17,675
0.25	7.70	13.825
0.21	15.50	6.075
0.15	11.05	0.55
0.105	0.95	0.075
0.074	0.15	0
<u> </u>	0	-

Very coarse sand (2.00-0.84mm) \	6.20
Coarse sand (0.84-0.42mm) \	39.725
Medium sand (0.42-0.25mm) \	40.25
Fine sand (0.25-0.15mm)	13,275
Very fine sand (0.15-0.074mm) *	0.55
Silt or clay (under 0.074mm)	0
Maximum grain size mm	0.84
60% grain size mm	0.48
30% grain size mm	0.34
10% grain size mm	0.23
Coefficient of uniformity Uc	2.087
Coefficient of curvature Uc'	1.047

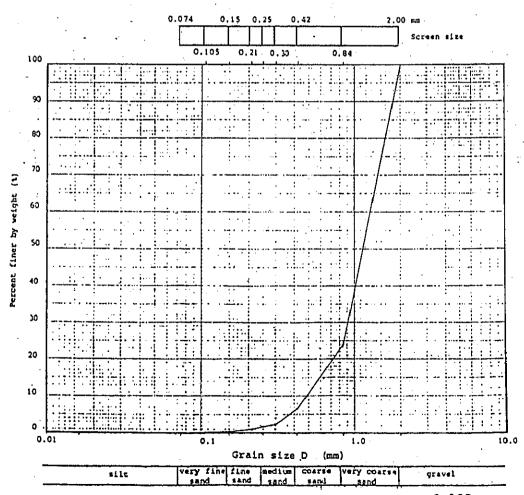


	•	÷	Grain Size Analysis	
	Sample No.	101 B	Date	
116		Beach Sand	Signature	
	Locality	Sanur Beach	-	

	< _	
Grain size (mm)	Weight (g).	Weight (%)
2.00		100
0.84	152,45	23.775
0.42	34.25	6.65
0.30	8.65	2.325
0.25	0.9	1.875
0.21	1.85	0.95
0.15	1.5	0.2
0,105	0.3	0.05
0.074	0.1	0
. `	0	-

76.225 17.125 4.775 1.675 0.20
4.775 1.675 0.20
1.675 0.20
0.20
<u>0.</u>
0,84
1.28
0.91
0.49
2.612

#### Grain size accumulation curve

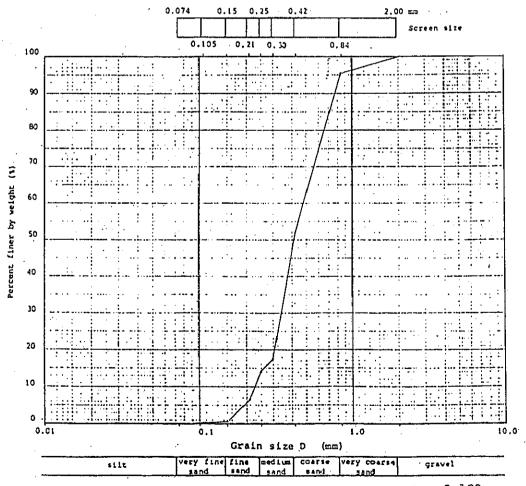


App.3.182

## Sample No. 102 A Date Name of sample Bali Beach Sand Signature Locality Sanur Beach

Grain size (mm)	Weight (g)	Weight (%)
2.00		100
0.84	18.85	95,575
0.42	85.35	52 <b>.90</b>
0.30	70.65	17.575
0:25	7.05	14.05
0.21	14.85	6.625
0.15	12.05	0.6
0.105	0.95	0.125
0.074	0.10	0.075
	0.15	-

Very coarse sand (2.00-0.84mm) \	4.425
Coarse sand (0.84-0.42mm) \	42.675
Medium sand (0.42-0.25mm)	38.85
Fine sand (0.25-0.15mm)	13.45
Very fine sand (0.15-0,074mm) \$	0.525
Silt or clay (under 0.074mm)	0.075
Maximum grain size mm	0.84
60% grain size mm	0.48
301 grain size mm	0.34
10\ grain size mm	0.225
Coefficient of uniformity Uc	2.133
Coefficient of curvature Uc'	1.070

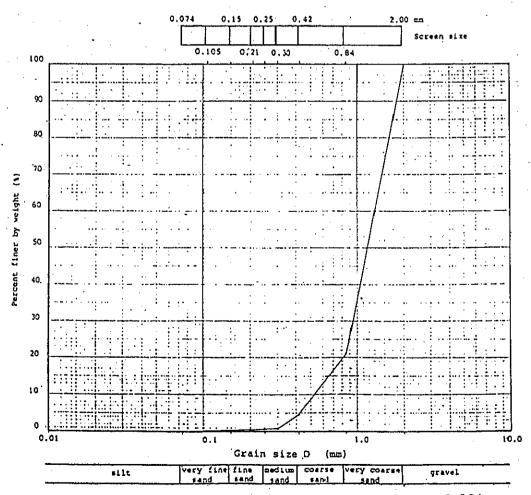


App.3.183

Sample No.	102 B		Date
Name of sample	Pali Beach Sand		Signature
Locality	Sanur Peach	<b>-</b>	

Grain size (mm)	Weight (g)	Weight (%)
2,00		100
0.84	158,25	20.875
0.42	32,45	4.65
0,30	7.50	0.90
0,25	0.40	0.80
0.21	0.70	0.35
0.15	0,60	0.05
0.105	0.05	0.025
0.074	0.05	0
	0	-

Very coarse sand (2.00-0.84mm) \	79,125
Coarse sand (0.84-0.42mm) \	16.225
Medium sand (0.42-0.25mm) •	3.85
Fine sand (0.25-0.15mm) *	0.75
Very fine sand (0.15-0.074mm) •	0.05
Silt or clay (under 0.074mm)	0
Maximum grain size mm	0.84
60% grain size mm	1.29
30% grain size mm	0.94
10% grain size mm	0.53
Coefficient of uniformity Uc	2,434
Coefficient of curvature Uc'	1.292
· · · · · · · · · · · · · · · · · · ·	

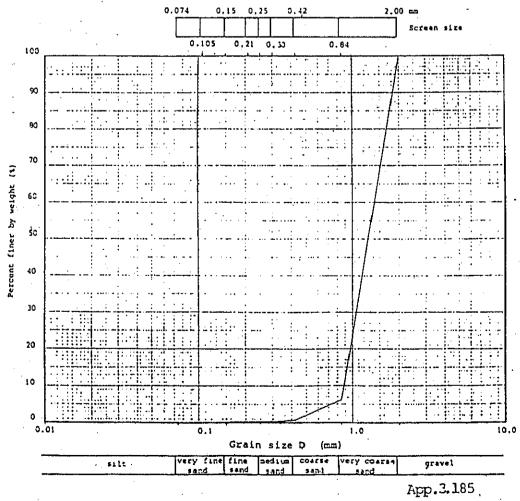


App.3.184

	•	Grain Size Analysis	
	Sample No.	103 A	Date
٠.		Bali Beach Sand	Signature
	Locality	Sanur Beach	

Grain size (mm)	Weight (g)	Weight (1)
2.00		100
0.84	187,70	6.15
0.42	10.55	0.875
0.30	1,30	0.225
0.25	0.10	0,175
0.21	0,10	0.125
0.15	0.10	0.075
0.105	0.05	0.05
0.074	0.10	0
,	. 0	-

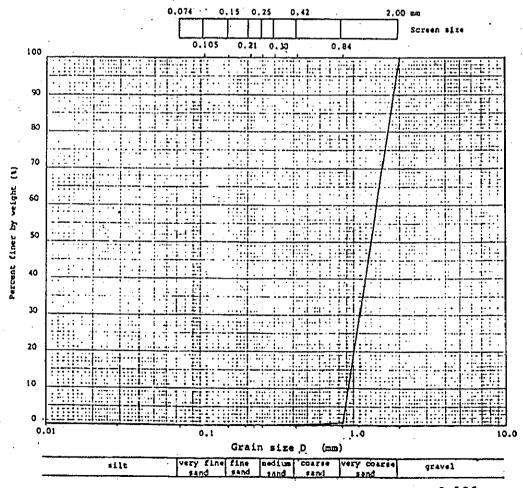
, <b>~</b>	
Very coarse sand (2.00-0.84mm) \	93,85
Coarse sand (0.84-0.42mm) %	5,275
Medium sand (0.42-0.25mm) \$	0.70
Fine sand (0.25-0.15mm) *	0.10
Very fine sand (0.15-0.074mm) *	0.075
Silt or clay (under 0.074mm)	0
Maximum grain size mm	0.84
60% grain size mm	1.39
30% grain size mm	1.06
101 grain size mm	0.89
Coefficient of uniformity Uc	1.562
coefficient of mirrorarch oc	



Sample No.	103 В	Date
Name of sample	Bali Beach Sand	Signature
Locality	Sanur Beach	***************************************

Grain size (mm)	Weight (g)	Weight (%)
2.00		100
0.84	199.05	0.475
0.42	0.85	0.05
0.30	0.10	0
0.25	0	0
0.21	0	0
0.15	0	0
0.105	00	0
0.074	0	0
,	0 .	-

Very coarse sand	(2.00-0.84mm) *	99,525
Coarse sand	(0.84-0.42mm) \	0.425
Hedium sand	(0.42~0.25mm) \$	0.05
Fine sand	(0.25-0.15mm) \$	0
Very fine sand	(0.15-0.074mm) \	0
Silt or clay (	under 0.074mm) •	0
Haximum grain size	to m	0.84
60% grain size	mm.	1.4
30% grain size	mm	1.1
10% grain size	mn	0.925
Coefficient of uni	formity Uc	1.514
Coefficient of cur	vature Uc'	0.934

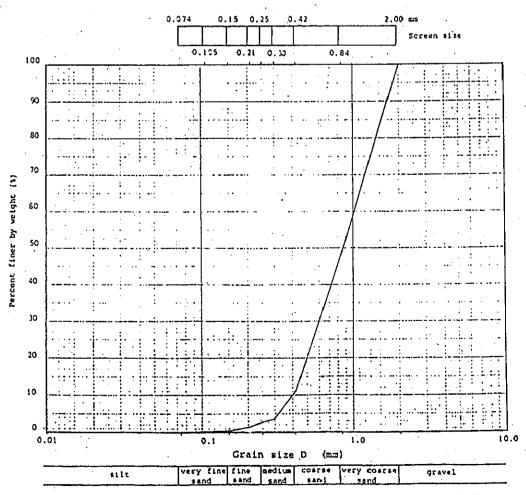


App.3.186

# Grain Size Analysis Sample No. 104 A Date Name of sample Beach Sand Signature Locality Sanur Beach

Grain size (mm)	Weight (g)	Weight (%)
	<u> </u>	
2.00		100
0.84	102.0	49.0
0.42	75.45	11.275
0.30	15.65	3.45
0.25	1.30	2.8
0.21	2.40	1.6
0.15	2.55	0.325
0.105	0.55	0.05
0.074	0.05	0.025
	0.05	-

Very coarse sand (2.00-0.84mm)	51.0
Coarse sand (0.84-0.42mm)	37,725
Hedium sand (0.42-0.25mm)	8.475
Fine sand (0.25-0.15mm)	2,475
Very fine sand (0.15-0.074mm)	0.300
Silt or clay (under 0.074mm)	0.025
Maximum grain size mm	0.84
60% grain size mm	1.01
30% grain size mm	0.6
10% grain size mm	0.4
Coefficient of uniformity Uc	2.525
Coefficient of curvature Uc'	0.891

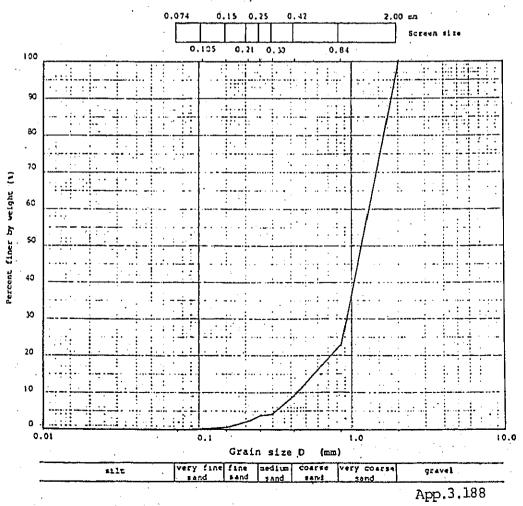


App.3.187

Sample No.	104 B	Date
Name of sample	Densis Good	Signature
Locality	Sanur Beach	

*		
Grain size (mm)	Weight (g)	Weight (%)
2.00		100
0.84	154.25	22.875
0.42	27.5	9.125
0.30	9.85	4.2
0.25	0.9	3.75
0.21	3.0	2,25
0.15	3.4	0.55
0.105	1.0	0.05
0.074	0.1	0
,	0	-

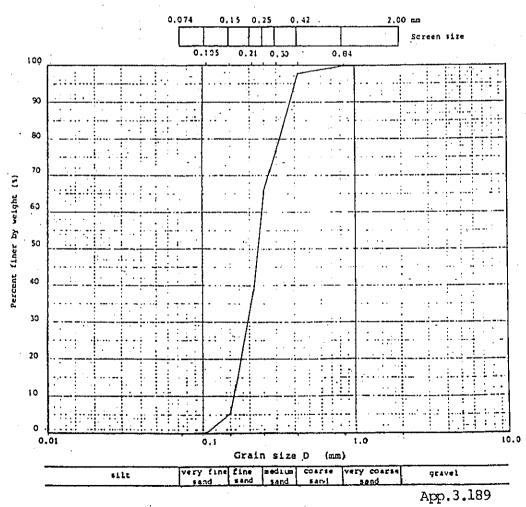
Very coarse	sand	(2.00-0	),84mm) 🔻	77.125
Coarse	sand	(0.84-0	),42mm) \	. 13.75
Medium	sand	(0.42-0	).25mm) 1	5.375
Fine	sand	(0.25-0	),15mm) \	3.2
Very fine	sand	(0.15-0	),074mm) <b>\</b>	0.55
Silt or o	lay	(under 0.	.074mm) *	0
Maximum gra	in size	: m.m		0.84
60 <b>v</b> gra	in size	3 Mm		1.3
30 gra	ıln size	2 (2005)		0.925
104 gr	in size			0.44
Coefficient	of uni	iformity	Uc	2.955
Coefficient	of cw	rvature	Uc'	1.496



Sample No.	105 A	Date
Name of sample	Beach Sand	Signature
Locality	Sanur Beach	- <del>-</del>

Grain size (mm)	Weight (g)	Weight (%)
2.00		100
0.84	0.1	99.95
0.42	4.4	97.75
0.30	41.65	76.925
0.25	22.10	65.875
0.21	5 <b>5.</b> 55	38.1
0.15	65.70	5.25
0.105	9.95	0.275
0.074	0.55	0
	0	-

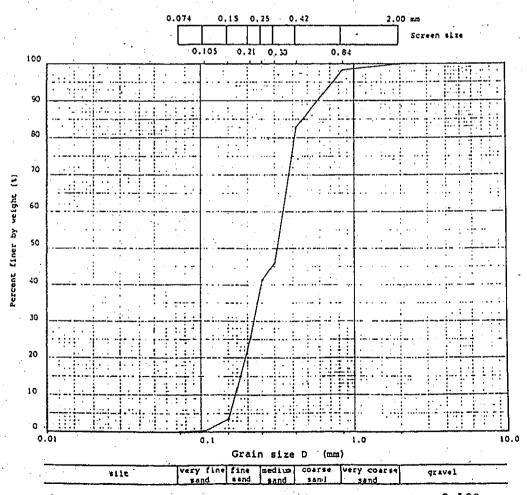
i .	
Very coarse sand (2,00-0,84mm) %	0.05
Coarse sand (0.84-0.42mm)	2.2
Medium sand (0.42-0.25mm)	31.875
Fine sand (0.25-0.15mm) \	60.625
Very fine sand (0.15-0.074mm)	5,25
Silt or clay (under 0.074mm)	0
Maximum grain size mm	0.84
60% grain size mm	0.24
30% grain size mm	0.193
10% grain size mm	0.159
Coefficient of uniformity Uc	1,509
Coefficient of curvature Uc*	0.976



Sample No.	105 B	Date
Name of sample	Beach Sand	Signature
Locality	Sanur Beach	

Grain size (mm)	Weight (g)	Weight (%)
		-
2.00		100
0.84	3.25	98.375
0.42	30.8	82.975
0.30	74.6	45,675
0.25	8,35	41.5
0.21	31.7	25.65
0.15	43.9	3.7
0.105	6.75	0.325
0.074	0.55	0.05
•.	0.10	,

1.625
15.4
41.475
37.8
3,65
0,05
0,84
0.34
0.22
0.165
2.06
0.863



## Grain Size Analysis Name of sample Bali Beach Sand

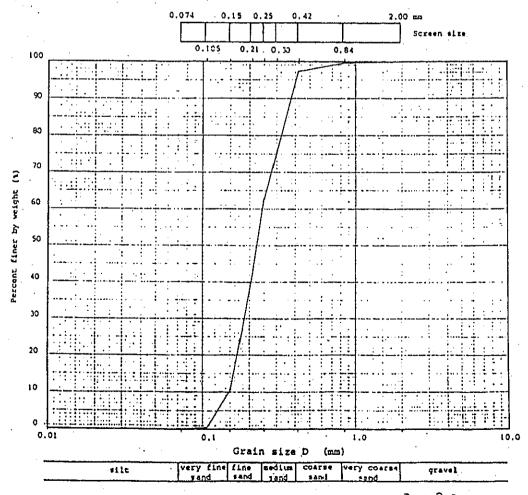
Grain size (mm)	Weight (g)	Weight (%)
2.00		100
0.84	0.55	99.725
0.42	4.6	97.425
0.30	43.85	75.5
0.25	25.70	62.65
0.21	39.35	42.975
0.15	64.30	10.825
0.105	18.15	1.75
0.074	3.50	0
	0	<b>-</b>

Sanur Beach

Very coarse sand (2.00-0.84mm)	0.275
Coarse sand (0.84-0.42mm) \	2.3
Medium sand (0.42-0.25mm)	34.775
Fine sand (0.25-0.15mm) \	51.825
Very fine sand (0.15-0.074mm) \	10.825
Silt or clay (under 0.074mm)	0
Maximum grain size mm	0.84
60% grain size mm	0.24
30% grain size mm	0.184
101 grain size -mm	0.145
Coefficient of uniformity Uc	1,655
Coefficient of curvature Uc'	0.973

#### Grain size accumulation curve

Sample No.

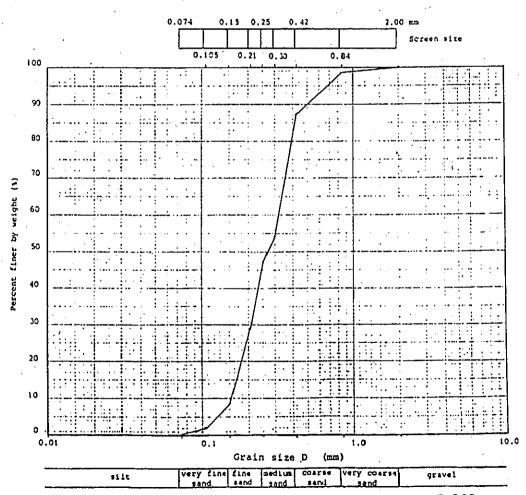


App.3.191

Sample No.	106 В	Pate
Name of sample	Beach Sand	Signature
Locality	Sanur Beach	

Grain size (mm)	Weight (g)	Weight (%)
2.00		100
0.84	2.95	98.525
0.42	22.75	87.15
0.30	65.55	54 • 375
0.25	14.3	47.225
0.21	33.75	30.35
0.15	43.3	8.7
0.105	13.2	2.1
.0.074	3,4	0.4
	0.8	-

Very coarse sand (2.00-0.84mm)	1.475
Coarse sand (0.84-0.42mm)	11.375
Medium sand (0.42-0.25mm)	39.925
Fine sand (0.25-0.15mm) \	38.525
Very fine sand (0.15-0.074mm) \	8.3
Silt or clay (under 0.074mm)	0.4
**************************************	
Maximum grain size mm	0.84
60% grain size mm	0.32
30% grain size mm	0.209
10% grain size mm	0.152
Coefficient of uniformity Uc	2.105
Coefficient of curvature Uc*	0.698

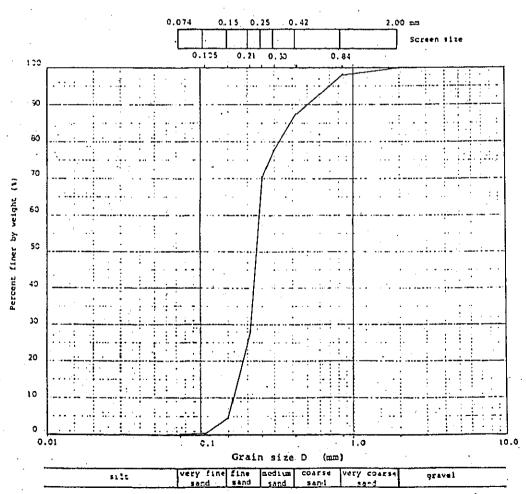


App.3.192

Sample No.	107 λ	Date
Name of sample		Signature
Locality	Sanur Beach	<u>-</u>

		4
Grain size (mm)	Weight (g)	Weight (%)
-		
2,00		100
0.84	4.2	97.9
0.42	20.85	87,475
0.30	59.2	57.875
0.25	14,75	50.5
0.21	45.10	27.95
0.15	47.3	4.3
0.105	8.10	0.25
0.074	0.05	0.225
	0.45	-

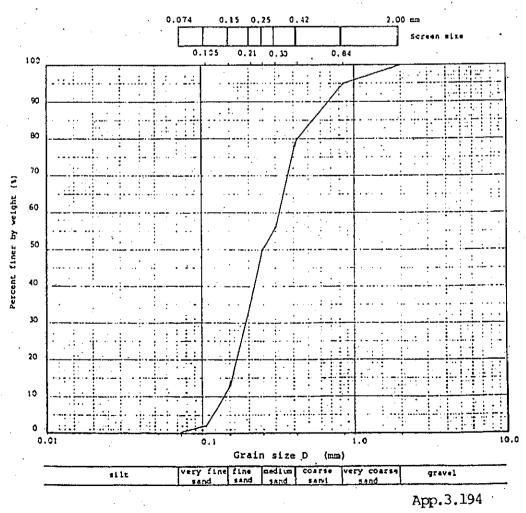
Very coarse sand (2.00-0.84mm)	2.1
Coarse sand (0.84-0.42mm)	10.425
Medium sand (0.42-0.25mm)	36.975
Fine sand (0.25-0.15mm)	46.2
Very fine sand (0.15-0.074mm) \	4.075
Silt or clay (under 0.074mm)	0.225
Maximum grain size mm	1.84
60% grain size mm	0.24
301 grain size mm	0.21
10% grain size mm	0.16
Coefficient of uniformity Uc	1.5
Coefficient of curvature Uc'	1.148



Sample No.	107 B	Da	ate
Name of sample	Bali Beach Sand	s:	ignature
Locality	Sanur Beach		

Grain size (mm)	Weight (g)	Weight (%) percent
2.00		100 <sup>.</sup>
0.84	9.75	95.125
0.42	32.40	79.925
0.30	45.85	56,00
0.25	12.65	49,675
0.21	24,75	37,30
0.15	49.05	12.775
0.105	21.40	2,075
0.074	3.85	0.150
	0.30	

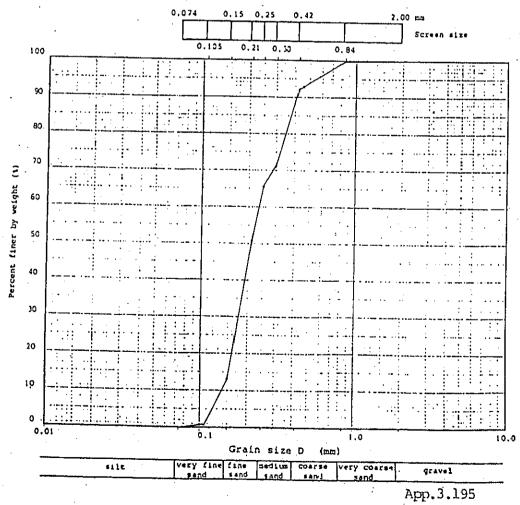
	6
Very coarse sand (2.00~0.84mm) \	4.875
Coarse sand (0.84-0.42mm) \	16.20
Medium sand (0.42-0.25mm)	29.25
Fine sand (0.25-0.15mm)	36.90
Very fine sand (0.15-0.074mm)	12.625
Silt or clay (under 0.074mm)	0.15
, , , ,	
Maximum grain size mm	0.84
60% grain size mm	0.32
30 grain size mm	0.19
10% grain size mm	0.138
Coefficient of uniformity Uc	2.319
Coefficient of curvature Uc'	0.817



		•	Grain Size Analysis	
16	Sample No.	108 A		Date
•	Name of sample	Eeach Sand		Signature
	Locality	Sanur Beach		

Grain size (mm)	Weight (g)	Weight (%)
2.00		100
0.84	0.25	99.875
0.42	15.85	91.95
0.30	41.55	71.175
0.25	11.35	65.5
0.21	28.35	51.325
. 0.15	76.4	13.125
0.105	22,55	1.85
0.074	3.70	ō
	0	

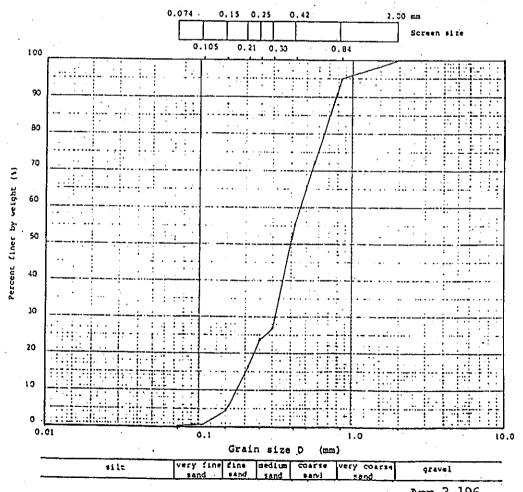
Very coarse sand	(2.00-0.84mm) \	0.125
Coarse sand	(0.84-0.42mm) \$	7.925
Medium sand	(0.42-0.25mm) \	26.45
Fine sand	(0.25-0.15mm) \	52,375
Very fine sand	(0.15-0.074mm) 🕻	19.125
Silt or clay (u	nder 0.074mm) 🕯	0
*****		
Maximum grain size	ne.	0.84
60% grain size	mm	0.235
301 grain size	mm .	0.175
10% grain size	mm .	0.138
Coefficient of unifo	ormity Uc	1.703
Coefficient of curve	ture Uc'	0.944
_		



Sample No.	108 B	Date ·
Name of sample	· · · · · · · · · · · · · · · · · · ·	Signature
Locality	Sanur Beach	

Grain size (mm)	Weight (g)	Weight (%)
2.00		100
0,84	9.4	95.3
0.42	79.2	55.7
0.30	57.33	27.035
0,25	6.67	23.7
0.21	14.15	16.625
0.15	23.95	4.65
0.105	8.15	0.575
0.074	0.55	0.30
	. 0.60	-

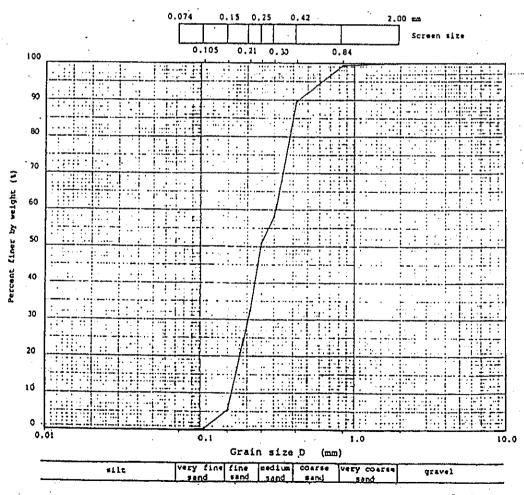
Very coarse	sand	(2.00-0.	84mm) \$	4.7
Coarse	sand	(0.84-0,	42mm) 1	39.6
Medium	sand	(0.42-0.	25mm) 🕻	32.0
Fine	sand	(0.25-0.	1 5mm) 🕻	19.05
Very fine	sand	(0.15-0.0	074mm) <b>1</b>	4.35
Silt or cl	Lay	(under 0.0	74mm) 🕻	0.30
·				
Maximum grai	n slz	e mm		0.84
60 grai	n siz	e mm		0.46
30 v grai	n siz	e mm		0.31
101 gras	n siz	e man		0.175
Coefficient	of un	iformity	Vc .	2.629
Coefficient	of cw	rvature	Vc'	1.194



# Sample No. 109 A Date Name of sample Beach Sand Signature Locality Sanur Beach

Grain size (mm)	Weight (g)	Weight (%)
2.00		100
0.84	1.15	99.425
0.42	19.85	89.5
0.30	62.8	58.1
0.25	14.0	51.10
0.21	37.05	32.57 <i>5</i>
0.15	54.5	5.325
0.105	10.1	0.275
0.074	0.55	Ó
	0	-

<u> </u>	
Very coarse sand (2.00-0.84mm) %	0.57 <b>5</b>
Coarse sand (0.84-0.42mm)	9.925
Medium sand (0.42-0.25mm) *	38.4
Fine sand (0.25-0.15mm) \	45.775
Very fine sand (0.15-0.074mm) 1	5.325
Silt or clay (under 0.074mm) \	.0
Maximum grain size mm	0.84
60% grain size mm	0.305
30 grain size mm	0.205
10% grain size mm	0.16
Coefficient of uniformity Uc	1.906
Coefficient of curvature UC'	0.861



App.3.197

### Grain Size Analysis Date \_\_ Pali Beach Sand Sanur Beach Signature \_

Grain size (mm)	Weight (g)	Weight (%)
2.00		100
0.84	10.85	94,575
0.42	42.10	73.525
0.30	62.10	42.475
0.25	11.30	36.825
0.21	25,50	24.075
0.15	38.85	4.65
0.105	8,35	0.475
0.074	0.95	0
	0	-

109 E

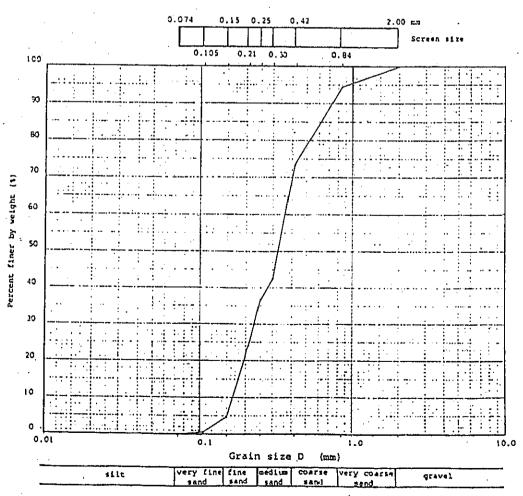
Very coarse sand (2.00-0.84mm) 1	5,425
Coarse sand (0.84-0.42mm)	21.05
Medium sand (0.42-0.25mm) \	36.70
Fine sand (0.25-0.15mm) \	32.175
Very fine sand (0.15-0.074mm) 1	4.65
Silt or clay (under 0.074mm) \	0 ·
Maximum grain size mm	0.84
60% grain size mm	0.36
30% grain size mm	0.225
101 grain size mm	0.165
Coefficient of uniformity Uc	. 2.182
Coefficient of curvature Uc'	0.852

#### Grain size accumulation curve

Sample No. \_

Locality \_\_\_

Name of sample

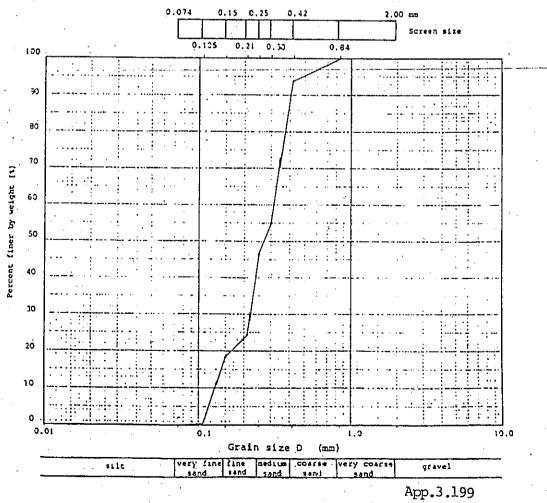


App.3.198

		****	
Sample No. 110	A	Date	
Name of sample	Beach Sand	Signature	
Locality	Sanur Bali		

Grain size (mm)	Weight (g)	Weight (1)
, <sub>40</sub> 40 40 70 70 70 70 70 70 70 70 70 70 70 70 70		
2.00	_L	100
0.84		100
0.42	11.85	94.075
0,30	77.90	55.126
0.25	16.75	46.75
0.21	44.85	24.325
0.15	42.95	2.85
0.105	5.6	0.05
0.074	0.1	0
	0	•

0
5.925
7,325
3.90
2.85
0
0.42
0.32
0.22
0.129
2,481
1.172



#### Grain Size Analysis 110 B Date Name of sample Beach Sand

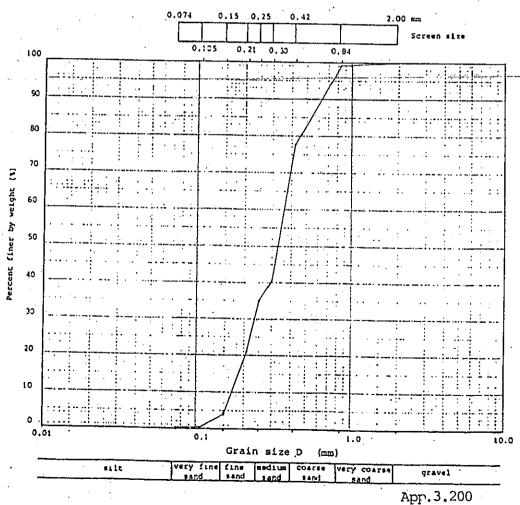
Grain size (mm)	Weight (g)	Weight (%)
2.00		100
	·}	100
0.84	1.45	99.275
0.42	43.1	77.725
0.30	74.65	40.4
0.25	10.8	35.0
0.21	28.25	20.875
0.15	33.85	3.95
0.105	7.05	0.425
0.074	0.45	0.20
	0.40	· -

Locality Sanur Beach

Very coarse sand (2.00-0.84mm)	0.725
Coarse sand (0.84-0.42mm)	21.55
Medium sand (0.42-0.25mm) \	42.725
Fine sand (0.25-0.15mm) *	31.05
Very fine sand (0.15-0.074mm) *	3,75
Silt or clay (under 0.074mm) \	0.20
Maximum grain size mm	0.84
60% grain size mm	0.36
30% grain size mm	0.23
10% grain size mm	0.17
Coefficient of uniformity Uc	2.118
Coefficient of curvature Uc'	0.864

#### Grain size accumulation curve

Sample No.



I-2. Specific Gravity

Gravity Specific

Name of sample River & Beach Sand
Locality Bali Beach Conservation Project
(Sample location as in Table

Date Signature

Specific	(r**C/4*C)	2.698	2.696	2.744	2.696	2.706	2,700	2.680	2.581	2.702	2.741	2,725	2.731	2.634	2.769	2,697	2.656	2.726	2.759
Specific gravity	(#*C/15*C)	2.700_	2.698	2.746	2.698	2.708	2.703	2.682	2,683	2.704	2.744	2.728	2.734	2.636	1.771	2.699	2.658	2.728	2.761
Specific	(T"C/T°C)	2.706	2.704	. 2.752	2.704	2.714	2.709	2.688	2.689	2.710	2.750	2.734	2.740	2.642	2.778	2.705	2.664	2.735	2.768
	T°C (by calculation) Wa (q)	664.16837	665.48199	661,24911	645,54917	. 657.39917	650.13199	651.96484	661,29921	648.96509	666.43432	6/15, 48/128	665.78412	666.49923	651.83287	643.79877	657.39917	664.03651	648.83262
, Ç		25.5	25.5	25.5	25.5	. 25.5	25.5	25.5	25.5	25.5	26	26	26	25.5	26.5	25.5	25.5	26.5	26.5
Weight totaled measuring flask, pure water and	Sample, at T°C Wb (q)	916,40	917.55	915.90	897.60	910.0	902.50	903.15	912.55	901.35	921.00	899.20	919.85	915.10	907.85	895.95	907.25	917.80	904.30
. <b>!</b> •		27.5	26.5	27	27	27	26.5	260	27	26	27	27	27	27	26	27	27	27.5	26
 Weight totaled measuring flask and pure water,	at T'°C Wa' (g)	663.90	665.35	661.05	645.35	657.20	650.00	651.90	661.10	648.90	666.30	645.35	665.65	666.30	651.90	643.60	657.20	663.90	648.90
Weight of measuring flask	Wf (g)	169.10	169.70	165.50	149.65	161.50	154.35	156.50	165.30	151.65	170.45	149.65	170.55	170.45	156.50	148.9	161.50	169.10	151.65
Weight of sample	₩s· (ŋ)	00h	400	700 <sub>t</sub>	00h	400	400	400	400	400	700 <sub>h</sub>	400	400	400	400	400	400	400	400
Sample No.		1.	.2	5.	-	20.	22 A	24 A	26 A	28 A	30 A	32 A	34 A	36 A	38 A	40 A	42 A	43 A	45 A

Gravity Specific

Name of sample River & Beach Sand
Locality Bali Beach Conservation Project
(Sample Location as in Table )

Signature Date

Hose (s)         at Tree (s)         at Tree (s)         tree (s)	oN of came?	Weight Of	Weight of measuring	Weight totaled measuring flask and pure water,		Weight totaled measuring flask, pure water and	ំ	Weight totaled measuring flask and pure water, at	Specific gravity	Specific gravity	Specific gravity
400         151.80         646.70         27         900.70         25.5         646.89885         2.736           400         148.90         643.60         27         899.50         25.5         641.29913         2.737           400         148.90         643.60         27         899.50         25.5         644.129913         2.737           400         148.80         644.35         27.5         918.55         25.5         644.1837         2.747           400         148.80         644.35         27         900.05         26         646.34911         2.722           400         151.80         646.70         27         900.05         26         646.33406         2.722           400         154.35         650.00         26.5         904.85         25.5         644.34911         2.722           400         154.35         661.00         26.5         904.85         25.5         644.34911         2.722           400         170.55         665.65         27         904.85         25.5         664.18837         2.725           400         162.15         665.65         27         910.05         25.5         664.0333         2.725	<b>.</b>	Ws (g)	flask Wf (g)	at T'°C Wa' (9)		sample, at T°C Wb (g)			(T"C/T"C)	(T*C/15°C)	(T°C/4°C)
400         148.90         643.60         27         899.50         25.5         641.29913         2.772           400         149.50         641.10         27         895.15         25.5         641.29913         2.737           400         149.50         641.10         27         897.15         25.5         644.16837         2.747           400         148.80         644.35         27         918.55         25.5         644.63406         2.722           400         151.80         646.70         27         900.05         25.5         644.63406         2.722           400         151.80         646.70         26         886.85         25.5         646.03406         2.722           400         151.65         661.00         26         886.85         25.5         660.13995         2.725           400         170.55         665.65         27         919.05         25.5         661.1095         2.725           400         162.15         663.75         27.5         918.75         25.5         6641.08333         2.725           400         151.65         648.90         26         902.20         25.5         649.03018         2.725		00†		646.70	27	02.006	25.5	646.89885	2.736	2.730	2.728
400         145.50         641.10         27         895.15         25.5         641.29913         2.737           400         169.10         663.90         27.5         918.55         25.5         644.1637         2.747           400         148.80         644.35         27         900.05         25.5         644.3911         2.722           400         151.80         646.70         27         900.05         26.5         646.83406         2.722           400         151.80         646.70         27         900.05         26.5         646.83406         2.722           400         154.35         650.00         26.5         904.85         25.5         661.12055         2.733           400         154.35         661.00         26         919.05         25         661.0355         2.722           400         162.15         663.75         27.5         919.75         25.5         661.0333         2.725           400         162.15         667.60         27         910.50         25         661.0333         2.725           400         162.15         657.60         27         910.50         26         657.2692         2.747	•	100	148.90	643.60		899.50	25.5	643.79877	2.772	2.766	2.764
400         169.10         663.90         27.5         918.55         25.5         664.16837         2.742           400         148.80         644.35         27         897.60         25.5         646.83406         2.722           400         151.80         646.70         26         904.85         25.5         646.83406         2.722           400         151.80         646.70         26         904.85         25         640.83406         2.722           400         170.55         661.00         26         886.85         25         661.1295         2.723           400         170.55         663.75         27         919.05         25         661.08333         2.725           400         151.65         648.90         26         902.20         25         649.03038         2.724           400         151.65         648.90         26         910.50         25         649.03038         2.724           400         151.65         665.35         26.5         910.50         26         665.4692         27.5           400         154.35         650.00         26.5         910.50         25.5         645.54917         2.713	51-2A	400	145.50	641.10		895.15	25.5	641.29913	2.737	2.731	2.729_
400         148.80         6444.35         27         897.60         25.5         644.54911         2.722           400         151.80         646.70         27         900.05         26         646.8406         2.725           400         154.35         650.00         26.5         904.85         25.5         650.13199         2.723           355.95         166.15         661.00         26         886.85         25         661.1295         2.733           400         170.55         665.65         27         919.05         25         664.08333         2.725           400         151.65         648.90         26         902.20         25         649.03318         2.724           400         151.65         648.90         26         902.20         25         649.03318         2.724           400         162.15         657.60         27         910.50         26         657.73421         2.717           400         164.35         657.00         26.5         910.50         25.5         649.8632         2.763           400         161.20         657.00         27.5         912.50         657.2693         2.763           400		00ħ	169.10	663.90		918.55	25.5	664.16837	2.747	2.741	2.739
400         151.80         646.70         27         900.05         26         646.83406         2.725           400         154.35         650.00         26.5         904.85         25.5         650.13399         2.753           355.95         166.15         661.00         26.5         886.85         25.5         661.12955         2.733           400         170.55         665.65         27         919.05         25.5         661.12955         2.733           400         168.75         663.75         27.5         918.75         25         664.08333         2.752           400         162.15         648.90         26         902.20         25         649.03018         2.724           400         162.15         648.90         26         910.50         26         657.73421         2.774           400         154.35         657.60         27         910.50         26         649.8632         2.765           400         154.35         650.00         26.5         903.05         27.5         649.8632         2.763           400         154.35         27.5         912.50         25.5         649.8632         2.763           400 <th>1</th> <td>400</td> <td>148.80</td> <td>644.35</td> <td></td> <td>897.60</td> <td>25.5</td> <td>644.54911</td> <td>2.722</td> <td>2.716</td> <td>2.714</td>	1	400	148.80	644.35		897.60	25.5	644.54911	2.722	2.716	2.714
400         154.35         650.00         26.5         904.85         25.5         650.13199         2.753           355.95         166.15         661.00         26         886.85         25.5         661.12955         2.723           400         170.55         665.65         27         919.05         25         664.08333         2.725           400         168.75         648.90         26         902.20         25         649.03018         2.724           400         151.65         648.90         26         902.20         25         649.03018         2.724           400         162.15         657.60         27         910.50         26         657.73421         2.717           400         161.20         657.00         26.5         919.95         25         649.8632         2.724           400         151.20         657.00         26.5         903.05         27.5         649.8632         2.725           400         161.20         657.00         27.5         912.50         25.5         649.8632         2.725           400         140.65         645.35         27         901.30         25.5         649.8632         2.725 <tr< td=""><th>ı</th><td>400</td><td>151.80</td><td>04.349</td><td>ı</td><td>900.05</td><td>26</td><td>646.83406</td><td>2.725</td><td>2.719</td><td>2.716</td></tr<>	ı	400	151.80	04.349	ı	900.05	26	646.83406	2.725	2.719	2.716
355.95         166.15         661.00         26         886.85         25         661.12955         2.733           400         170.55         663.75         27.5         919.05         25.5         664.08333         2.725           400         162.15         663.75         27.5         918.75         25         664.08333         2.724           400         162.15         667.60         27         910.50         26         649.03018         2.724           400         162.15         657.60         27         919.95         25         649.03018         2.724           400         169.70         665.35         26.5         919.95         25         649.8632         2.747           400         154.35         650.00         26.5         903.05         27.5         649.8632         2.763           400         161.20         657.00         27.5         912.50         25.5         649.84917         2.773           400         149.65         645.35         27         901.30         25.5         645.54917         2.763           400         149.65         645.35         27         901.30         25.5         645.54917         2.763		400	154.35	650.00		904.85	25.5	650.13199	2.753	2.747	2,745
400         170.55         665.65         27         919.05         25.5         665.84893         2.725           400         168.75         663.75         27.5         918.75         25         669.08333         2.724           400         151.65         648.90         26         902.20         25         649.03018         2.724           400         162.15         657.60         27         910.50         26         657.73421         2.717           400         164.35         26.5         919.95         25         649.8632         2.725           400         154.35         650.00         26.5         903.05         27.5         649.8632         2.725           400         151.20         657.00         26.5         912.50         25.5         649.8632         2.763           400         149.65         645.35         27         901.30         25.5         649.54917         2.773           400         151.05         645.39         27         901.30         25.5         645.54917         2.763           400         161.50         677.26         30.30         25.5         645.54917         2.763           400         151.05 <th></th> <td>355.95</td> <td>166.15</td> <td></td> <td></td> <td>886.85</td> <td>25</td> <td>661.12955</td> <td>2.733</td> <td>2.727</td> <td>2.725</td>		355.95	166.15			886.85	25	661.12955	2.733	2.727	2.725
400         168.75         663.75         27.5         918.75         25         664,08333         2.752           400         151.65         648.90         26         902.20         25         649.03018         2.724           400         162.15         657.60         27         910.50         26         657.73421         2.717           400         169.70         665.35         26.5         919.95         25         649.8632         2.747           400         154.35         650.00         26.5         903.05         27.5         649.8632         2.763           400         161.20         657.00         27.5         912.50         25.5         649.8632         2.763           400         149.65         645.35         27         901.30         25.5         645.54917         2.773           400         121.63         645.35         27         901.30         25.5         645.54917         2.763           400         161.50         645.35         27         901.30         25.5         645.54917         2.763           400         161.50         645.36         27         901.30         25.5         645.4917         2.763		400	170.55	665.65	27	919.05	25.5	665.84893	2.725	2.719	2.717
400         151.65         648.90         26         902.20         25         649.03018         2.724           400         162.15         657.60         27         910.50         26         657.73421         2.717           400         169.70         665.35         26.5         919.95         25         665.54692         2.725           400         154.35         650.00         26.5         903.05         27.5         649.8632         2.725           400         151.20         657.00         27.5         912.50         25.5         649.8632         2.763           400         149.65         645.35         27         901.30         25.5         645.54917         2.773           400         151.65         645.35         27         901.30         25.5         645.54917         2.763           400         161.50         645.35         27         901.30         25.5         645.54917         2.763           400         161.50         645.36         27         901.30         25.5         645.54917         2.763           400         161.50         645.15         27         897.15         25.5         645.000         2.763		700		663.75	27.5	918.75	25	664.08333	2.752	- 2.246	2.744
400         162.15         657.60         27         910.50         26         657.73421         2.717           400         169.70         665.35         26.5         919.95         25         665.54692         2.717           400         154.35         650.00         26.5         903.05         27.5         649.8632         2.725           400         151.20         657.00         27.5         912.50         25.5         645.84917         2.773           400         191.65         645.35         27         901.30         25.5         645.54917         2.773           400         151.69         677.26         77         901.30         75.5         645.54917         2.763           400         151.65         677.26         77         901.30         75.5         645.54917         2.763           400         161.50         677.26         77         901.30         75.5         645.54917         2.763           400         161.50         677.26         77         897.15         25.5         645.04917         2.715	70 A	400	151.65	648.90	26	902.20	25	649.03018	2.724	2.718	3.716
400         169.70         665.35         26.5         919.95         25         665.54692         2.747           400         154.35         650.00         26.5         903.05         27.5         649.8632         2.725           400         151.20         657.00         27.5         912.50         25.5         645.54917         2.773           400         149.65         645.35         27         901.30         25.5         645.54917         2.773           400         151.65         645.39         26         904.20         25.5         645.54917         2.773           400         151.65         645.25         645.54917         2.763           400         161.50         677.20         77         901.30           400         149.45         645.15         27         897.15         25.5         6415.94917         2.763		0017	162.15	657.60	27	910.50	26	657.73421	2.717	2.711 -	2.708
400         154.35         650.00         26.5         903.05         27.5         649.8632         2.725           400         161.20         657.00         27.5         912.50         25.5         645.892         2.763           1         400         149.65         645.35         27         901.30         25.5         645.54917         2.773           400         151.65         646.35         7         904.20         25         645.65         2.763           400         151.65         645.20         7         910.00         26         647.808         2.715           400         149.45         645.15         27         897.15         25.5         6415.04917         2.699		400	169.70			919.95	25	665.54692	2.747	2.741	2.739
400         161.20         657.26892         2.763           400         149.65         645.35         27         901.30         25.5         645.54917         2.773           400         151.65         645.35         27         901.30         25.5         645.54917         2.773           400         151.65         645.15         77         970.30         26         645.34917         2.763           400         149.45         645.15         27         897.15         25.5         645.04917         2.699		400	154.35	650.00	· _*	903.05	27.5	649.8632	2.725	2.718	2:7:5
400         149.65         645.35         27         901.30         25.5         645.54917         2.773           400         151.65         645.35         27         904.20         25.5         645.5591         2.763           400         161.50         647.20         77         970.30         26         647.3288         2.715           400         149.45         645.15         27         897.15         25.5         6415.04917         2.699		0017	161.20	657.00	, •	912.50	25.5	657.26892	2.763	2.757	2.755.
460         151.65         648.90         25         648.95         2.763           400         149.45         645.15         27         897.15         25.5         645.04917         2.699		0017	149.65	645.35	27	901.30	25.5	645.54917	2.773	2.767_	- 2.765
A         400         161.50         645.15         77         970.00         26         645.04917         2.699	80-2A	00tr	151.65	648.90		904.20	5.5	648, 76909	2.763	2.756	2.755
A 400 149.45 645.15 27 897.15 25.5 645.04917 2.699		COtr	161.50	627.29	 	50.019	30	677.34.8	2.715	2.709	2.706
	83. A	700	149.45	645.15	. 27	897.15	25.5	645.04917	2.699	2.693	2.691

Gravity Specific

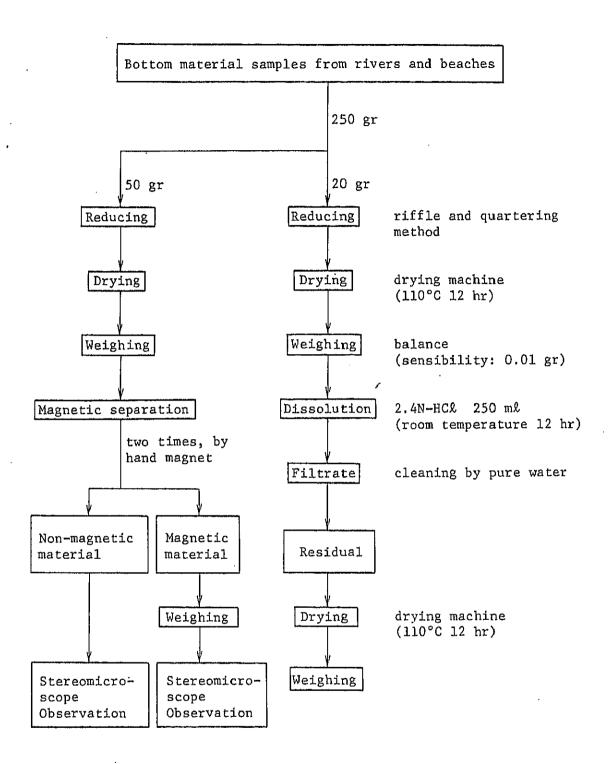
Name of sample River & Beach Sand
Locality Bali Beach Conservation Project
(Sample Location as in Table )

Signature

Date

Sample No.	Weight of sample	Weight of measuring	Weight totaled measuring flask and pure water,	٦. "٦	Weight totaled measuring flask, pure water and	7 °C		Specific	Specific gravity	Specific gravity
	Ws (g)	Wf (g)	at T'°C Wa' (9)		sample, at T°C Wb (q)		T°C (by calculation) Wa (η)	(T°C/T°C)	(T*C/15°C)	(T°C/4°C)
85 A	700	149.45	645.15	27	898.70	56	645.28428	2.729	2.723	2.720
88 A	0017	156.50	651.90	26	907.80	25	652.02969	2.773	2.767	2.764
91 A	004	165.50	661.05	27	910.45	25.5	661.24911	2.653	2.647	2.645
94 A	007	165.50	661.05	27	912.70	25.5	661.24911	2.693	2.687	2.685
.97 A	700	162.15	657.60	27	908.95	25.5	657.79907	2.687	2.681	2.678
100 A	400	145.50	641.10	27	897.00	25.5	641.29913	2.772	2:766	2.764
	700	148.80	644.35	27	901,40	26.5	644.41Z09		-2.790	2.788
102 A	001	166.15	661.00	26	917.30	26.5	660.93294	2.785	2.778	2.776
104 A	400	169.70	665.35	26.5	921.70	26	665.41711	2.783	2.777	-2.774
105 A	700	161.20	657.00	27.5	968.15	26 .	657.20397	4.492	4.482	4.478
106 A	400	168.75	663.75	27.5	963.0	26		3.962	3.953	3.949
108 A	400	154.35	650.00	26.5	953.45	25.5	650.13199	4.137	4.128	4-124
110 A	00.17	165.30	661.10	27	975.65	26	661.23431	4.674	4.663	4.659
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									       	! ! ! ! ! !
	 	,	; ; ; ] ]	1	 	 			1	1           
			! ! ! ! !	. —         	 					

I-3. Mineral Composition Test



Flow Sheet showing the Procedures of Magnetic Separation and 2.4N-HCL Soluble Test

Name of sample Beach Sand
Locality Bali Beach

Date \_\_\_\_\_\_Signature \_\_\_\_\_

٠.

	<u> </u>	lubility tost		OWNCL		<u> </u>	Magnetic so	parat	ion	
ample No.	Weight of	Soluble m	•	Unsoluble	m,	Weight of	Magnetic m	ď	Non-magneti	c n.
	sample (g)	Weight (g)	*	Weight (g)	•	sample (g)	Weight (g)	1	Welght (g)	1
1	20	19.76	98.80	0.24	1.20	100	1.54	1.54	98.46	3 6 6
2	20	19.74	7.7522.7098.70198	0.26	1.30	100	1.71	1.73	98.29	00
5	20	4.54	22.70	15.46	25/77.30	100	5.71	5.71	94.29	2
11	20	1.55	ļ	18.45	92	100	49.69	49.69	50.31	2
20 A	20	1.36	6.80	18.64	93.20	100	31.52	31,52	68.48	87 83
22 A	20	18.71	93.55	1.29	6.45	100	2,32	2.32	97.68	97 68
24 A	20	18.92	94.60	1.08	5.40	100	4,21	4.21	95.79	1 96 45195 70
26 A	20	18.96	94.80	1.04	5.20	100	3,55	3.55	96.45	96.451
28 A	20	19.07	95.35	0.93	4.65	100	3.55	3.55	96.45	96.45
30 A	20	19.20	96.00	0.80	4.00	100	3.87	3.87	96.13	96.13
32 A	20	19.45	.6097.25	0.55	2.75	100	1.90	1.90	98.10	98.10
34 A	20	19.12			4.40	100	3.31	3.31	96.69	69
36 A	20	19.40	.2597.0095	0.60	3.00	100	2.71	2.71	97.29	97.29
38 A	20	19.85	99.25	0.15	0.75	100	2.26	2.26	97.74	97.74
40 A	20	19.78	98.999	0.22	1.1	100	1.28	1.28	98.72	98.72

#### Hineral Composition

•	·
Name of sample Beach Sand	
	Date
tanaling mail mail	
Locality	Signature

		lubility test	by 2	OV HCL			Magnetic se	Dara	- 1,0	
Sample No.	Weight of	Soluble m	١.	Unsoluble	m. ·	Weight of	Magnetic m		Non-magneri	<u> </u>
	sample (q)	Weight (g)	1	Weight (g)	`	sample (q)	Weight (q)	١,	Weight (q)	1
42 A	20 ,	19.79	0598.95		1.05	100	1,49	1.49	98,51	13
43 A	20	19.61	98.	0.39	1.95	100	1.92	1.92	98.08	98.08 98.
45 A	20	18.36	91.80	1.64	8.20	100	0.95	0.95	99.05	.70 99.05
47 A	-20	18.47	7592.35	1.53	7.65	100	3.30	3,30	96,70	96.70
49 A	20	18.55	9592:75	1.45	7.25	100	3,63	3,63	96.37	96.37
51-2A	20	16.39	81.95	3.61	18.05	100	3.19	3.19	96.81	l .
53 A	20	16.07	8080.35	3.93	19.65	1.00	5.94	5.94	94.06	94.06,96.81
55 A	20	13.96	69.80	6.04	30.20	100	5.29	5.29	94.71	94.71
57 A	20	17.35	7586.7569.	2.65	25/13.25/30	100	5.13	5.13	94.87	94.87
59 A	20	19.15	.9095.75	0.85	4	100	3.53	3.53	96.47	96.47
61 A	20	16.18	8	3.82	19.10	100	2.46	2.46	97.54	97.54
65 A	20	11.93	59.65	8.07	7040.35	100	9.95	9.95	90.05	90.05
67 A	20	15.06	1575.30	4.94	8524.70	100	6.49	6.49	93.51	93.51
70 A	20	12.83		7.17	2935.85	100	10.00	19.0	90.00	90.00
73 A	20	14.35	71.7564	5.65	28.29	100	15.00	15.0	85.00	e 00.38

Npp. 2.2

#### Mineral Composition

Name of s	sample Beach	Sand	Date
Locality	Pali P	Beach	Signature

	<del></del>	lubility test	Dy 2				Magnetic se	parat	ion	
sample No.	Weight of	Soluble m	•	Unsoluble	ы.	Weight of	Magnetic n	•	Nomagneti	c m
	sample (g)	Weight (g)	• 1	Weight (g)	•	sample (g)	Weight (g)	•	Weight (g)	•
75 A	20 ,	12.95	64.75	7.05	35.25	100	14.06	14.06	85.94	0
76 A	20	11.22	56.1064	8.78	43.9035	100	11.00	11.00	89.00	9
78 A	20	11.05	55.255	8.95	44.754	100	10.03	10.03	89.97	100 00
0-1 A	20	10.95	554.755	9.05	545.254	100	14.51	14.51	85,49	- A
0-2 A	20	15.51	65,77,55	4.49	522.45	100	7.15	7.15	92.85	19.7
81 A	20	19.93	99.	0.07	0.35	100	0,15	0.15	99,85	28 00
83 A	20	19.82	3099.10	.0.18	06.0	100	0.30	0.30	99.70	99 70
85 A	20	19.86	6	0.14	0.70	100	0.45	0.45	99.55	99 55
88 A	20	19.55	597.759	0.45	2.25	100	1.17	1.17	98,83	68 83
01 A	20	19.95	599.75	0.05	0.25	100	0.27	0.27	99.73	99 73
94 A	20	19.91	99.5	0.09	0.45	100	0.06	0.06	99.94	99 94
97 A	20	19.64	1098.20	0.36	1.80	100	0.74	0.74	99.26	99. 26
100 A	20	19.62	98.	0.38	1.90	100	1.39	1.39	98.61	98.61
101 A	20	19.41	97.05	0.59	2.95	100	2,36	2.36	97.64	97.64
102 A	20	19.53	97.65	0.47	2.35	100	0.27	0.27	99.73	99.73

Mineral	Composi	rion

Name of sample	Beach Sand	Date	
racality	Bali Beach	Signature	-

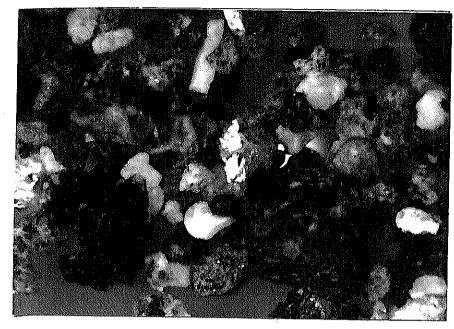
	So	lubility test	by 2	0			Magnetic so	parac	Ica	·
Sample No.	Weight of	Soluble m		Unsoluble	m.	Weight of	Magnetic m		Non-magne ci	c m.
•	samble (d)	Weight (g)	`	Weight (g)	*	sample (g)	Weight (g)	``	Weight (g)	1
104 Λ	20	14.40	72.00	5.60	2528.00	100	20,56	20.56	79,44	79.44
105 A	20	1.95	9.75	18.05	7090.25	100	95,88	95,88	4.12	4.12
106 λ	20	1.66	8.30	18.34	1091.70	100	81.37	81.37	18.63	18.63
108 A	20	. 1.98	9.90	18.02	9590.10	100	95.05	95.05	4.95	4.95
110 A	20	1.21	6.05	18.79	95.95	II	97.48	97.48	2.52	2.52
***************************************			:		ļ					
					-			<u></u>		
*****					†			 	<u> </u>	
The safe was a second					1		<del></del>	·		
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	,		7.1.	· · · · · · · · · · · · · · · · · · ·	<del></del>	P			App. 2.4.	<u></u>

Bott	om Material	Magnetic Material	Non-magnetic Material
	River between Sawangan and Petangan Village	Magnetic material consists mainly of magnetite, and partly contains quartz, amphibole and brown iron-oxide material.	Non-magnetic material consists mainly of brown iron-oxide material including plagioclase, amorphous material and coral limestone fragment, and rarely contains amphibole and quartz.
in River	Ayung River	Magnetic material consists mainly of magnetite, and partly contains quartz, plagioclase, amphibole and andesite ∿ basalt fragment, including magnetite.	Non-magnetic material consists mainly of white unknown material (clay mineral?), andesite \(^\) basalt, welded tuff (lahar) and obsidian fragment, and rarely contains quartz, amphibole and pyroxene.
	Loloan	Magnetic material consists mainly of magnetite, and partly contains quartz, plagioclase, amphibole and andesite \(^\begin{align*} \text{basalt} \text{fragment, including} \text{magnetite.}	Non-magnetic material consists mainly of white unknown material (clay mineral?), andesite \(\nabla\) basalt and welded tuff (lahar) fragment, and rarely contains quartz, amphibole and pyroxene.

Bott	tom Mate	rial	Magnetic Material	Non-Magnetic Material
in Beach	Kuta Beach Nusa Dua Beach		Magnetic material consists mainly of magnetite, and partly contains quartz, plagioclase, amphibole, pyroxene, andesite ∿ basalt, obsidian and coral fragment, including magnetite.  Magnetic material consists mainly of magnetite, and partly contains quartz, amphibole, pyroxene,	Non-magnetic material consists mainly of coral fragment (ball, dendritic shape etc.), and partly contains quartz, plagioclase, amphibole, pyroxene, andesite ∿ basalt, obsidian and coral limestone fragment.  Non-magnetic material consists mainly of coral fragment (ball, star, dendritic shape etc.),
			reddish brown unknown material and coral fragment, including magnetite.	and rarely contains quartz, amphibole, reddish brown unknown material, obsidian and coral limestone fragment.
	Sanur Beach	The Southern side from the Groin	Magnetic material consists mainly of magnetite, and partly contains quartz, amphibole, pyroxene, andesite ∿ basalt, obsidian and coral fragment, including magnetite.	Non-magnetic material consists mainly of coral fragment (ball, dendritic shape etc.), and rarely contains quartz, plagioclase, amphibole, pyroxene, andesite ~ basalt, obsidian and coral lime-stone fragment.

Boti	tom Ma	terial	Magnetic Material	Non-magnetic Material
in Beach	Sanur Beach	Between the Groin and the Coral Reef Edge	Magnetic material consists mainly of magnetite, and partly contains quartz, amphibole, pyroxene, andesite ∿ basalt, welded tuff (lahar) and obsidian fragment, including magnetite.	Non-magnetic material consists mainly of coral fragment, and partly contains quatz, plagioclase, amphibole, pyroxene, andesite ∿ basalt, obsidian and coral limestone fragment.
		The Northern Side from the Coral Reef Edge	Magnetic material consists almost wholly of magnetite, and rarely contains quartz, plagioclase, amphibole, pyroxene and andesite \( \cdot\) basalt fragment, including magnetite.	Non-magnetic material consists of quartz, plagioclase, amphibole, pyroxene, andesite ∿ basalt fragment and carbonate material.

### Stereo-microscopic photographs of the bottom material in beach (1)



O 0.5m/m

Magnification: x 50

Sample No. 67 A: Magnetic materials (beach sand), in Kuta Beach.



O 1.Om/m

Magnification: x 20

Sample No.67 A: Non-magnetic materials (beach sand), in Kuta Beach.

## Stereo-microscopic photographs of the bottom material in beach (2)



O 1.Om/m

Magnification: x25

Sample No.34 A: Magnetic materials (beach sand), in Nusa Dua Beach.

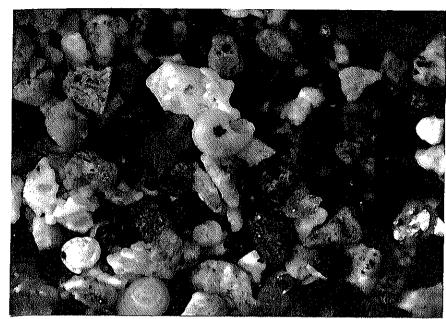


Q 1.0m/m Scale

Magnification: x 25

Sample No.34 A: Non-magnetic materials (beach sand), in Nusa Dua Beach.

Stereo-microscopic photographs of the bottom material in beach (3)



O 1.0m/m

Magnification: x 20

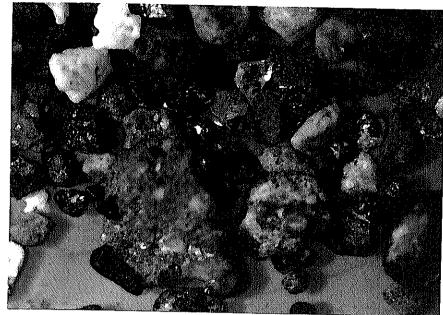
Sample No.100 A: Magnetic materials (beach sand), the southern side from the groin of Bali Beach Hotel, in Snur Beach.



Magnification: x 15

Sample No.100 A: Non-magnetic material (beach sand), the southern side from the groin of Bali Beach Hotel, in Sanur Beach.

Stereo-microscopic photographs of the bottom material in beach (4)



O 1.0 m/m Scale

Magnification: x 15

Sample No.104 A: Magnetic materials (beach sand), between the groin of Bali Beach Hotel and the coral reef edge, in Sanur Beach.

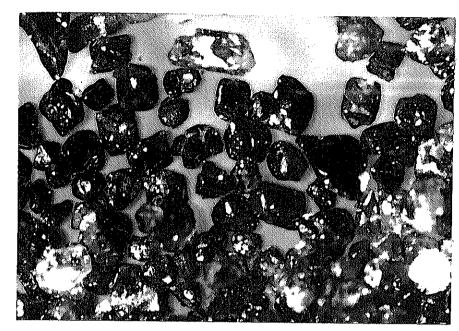


O 1.0 m/m Scale

Magnification: x 15

Sample No.104 A: Non-magnetic materials (beach sand), between the groin of Bali Beach Hotel and the coral reef edge, in Sanur Beach.

Stereo-microscopic photographs of the bottom material in beach (5)



O\_\_\_\_O.5 m/m

Magnification: x 40

Sample No.105 A: Magnetic materials (beach sand), the northern side from the coral reef edge, in Sanur beach.

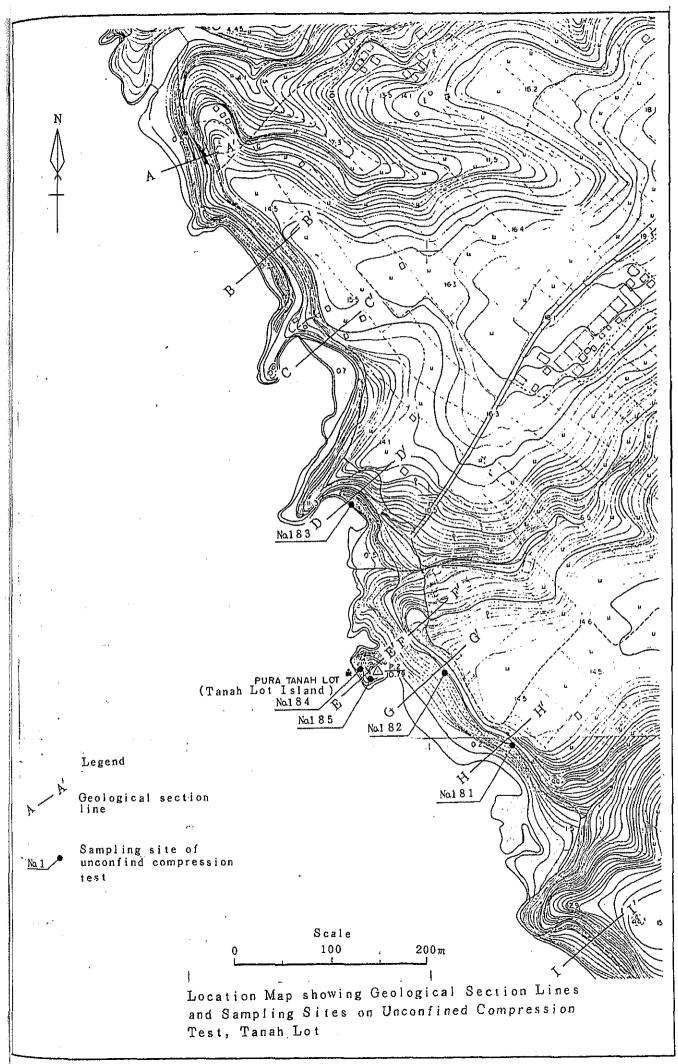


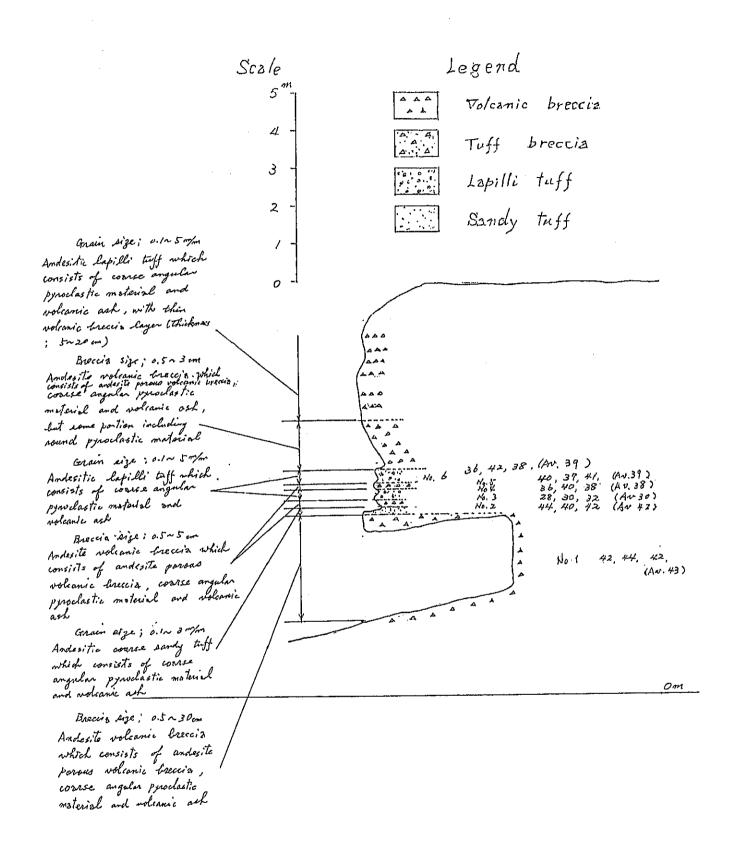
O O.5 m/m Scale

Magnification: x 40

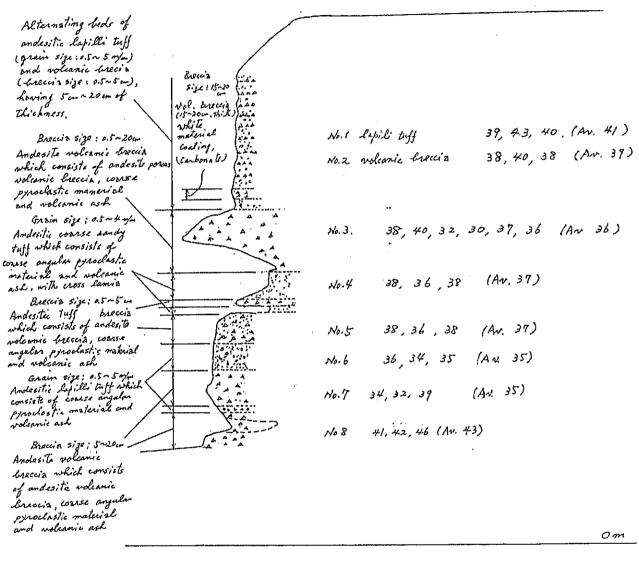
Sample No.105 A: Non-magnetic materials (beach sand), the northern side from the coral reef edge, in Sanur Beach.

II. Geological Survey and Unconfined Compression Test, Tanah Lot





GEOLOGICAL SECTION A-A'



Scale

Legend

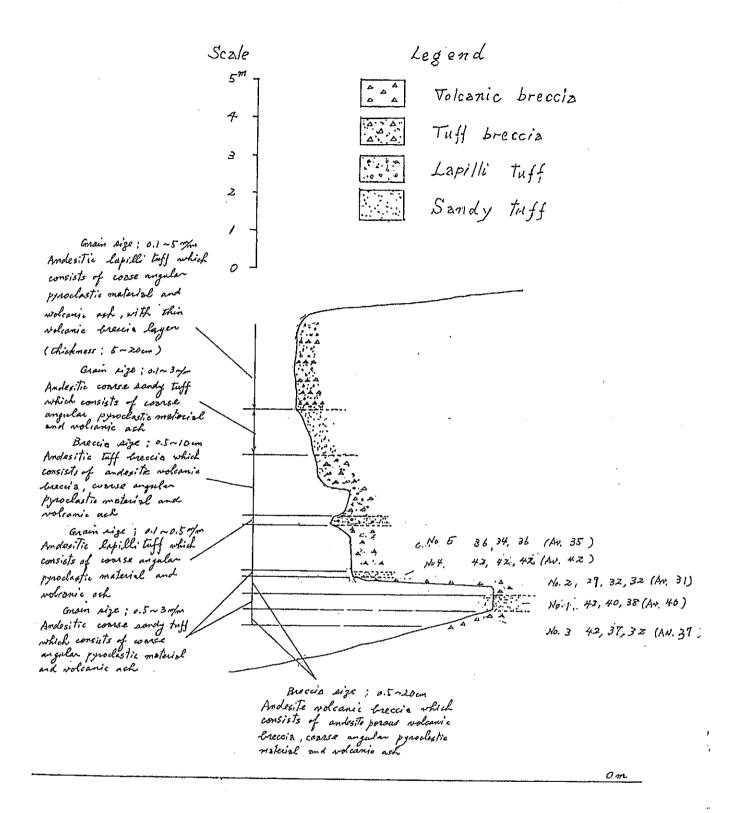
Toloric breccia

Tuff breccia

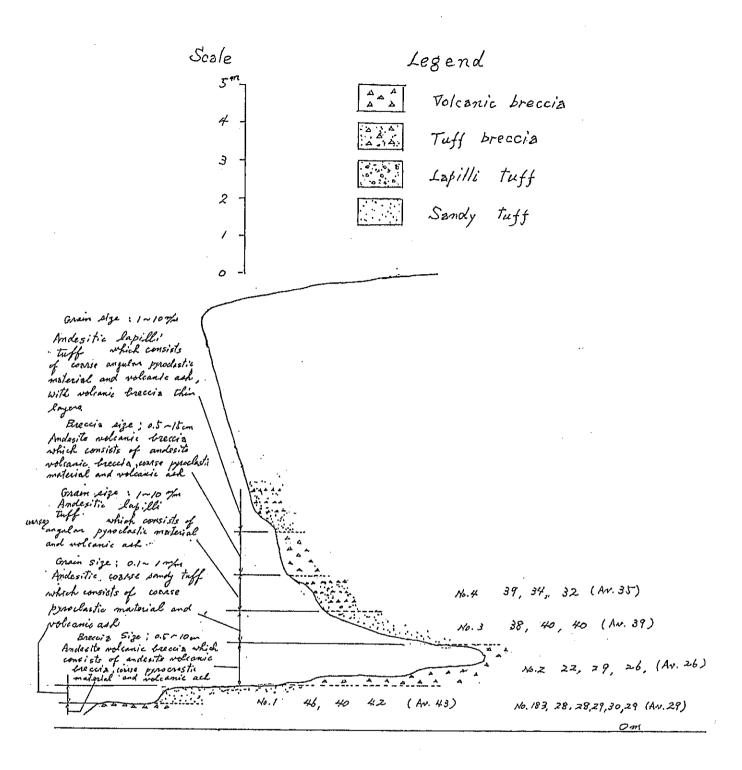
Lapilli tuff

Sanoly tuff

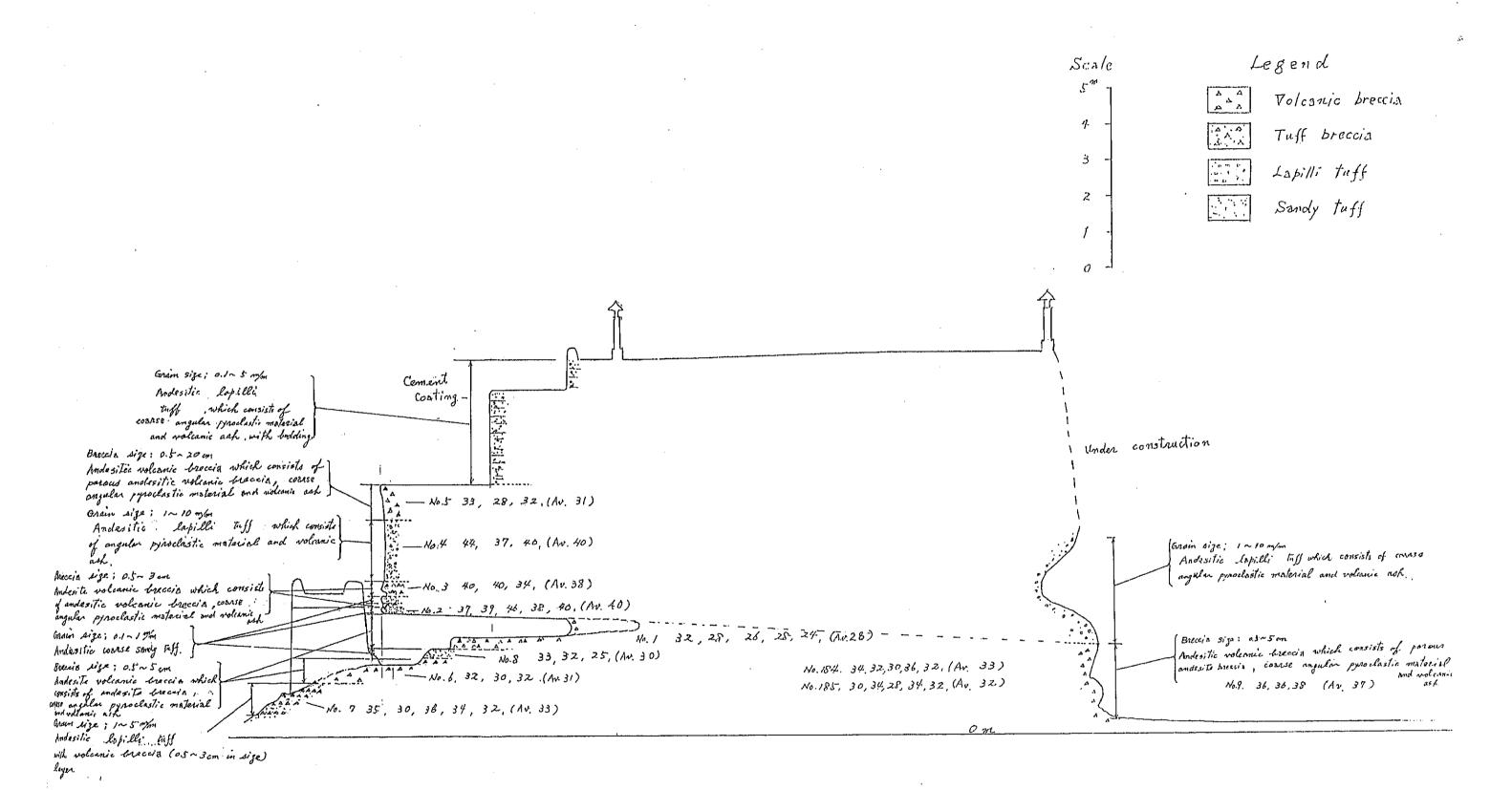
GEOLOGICAL SECTION B - B'

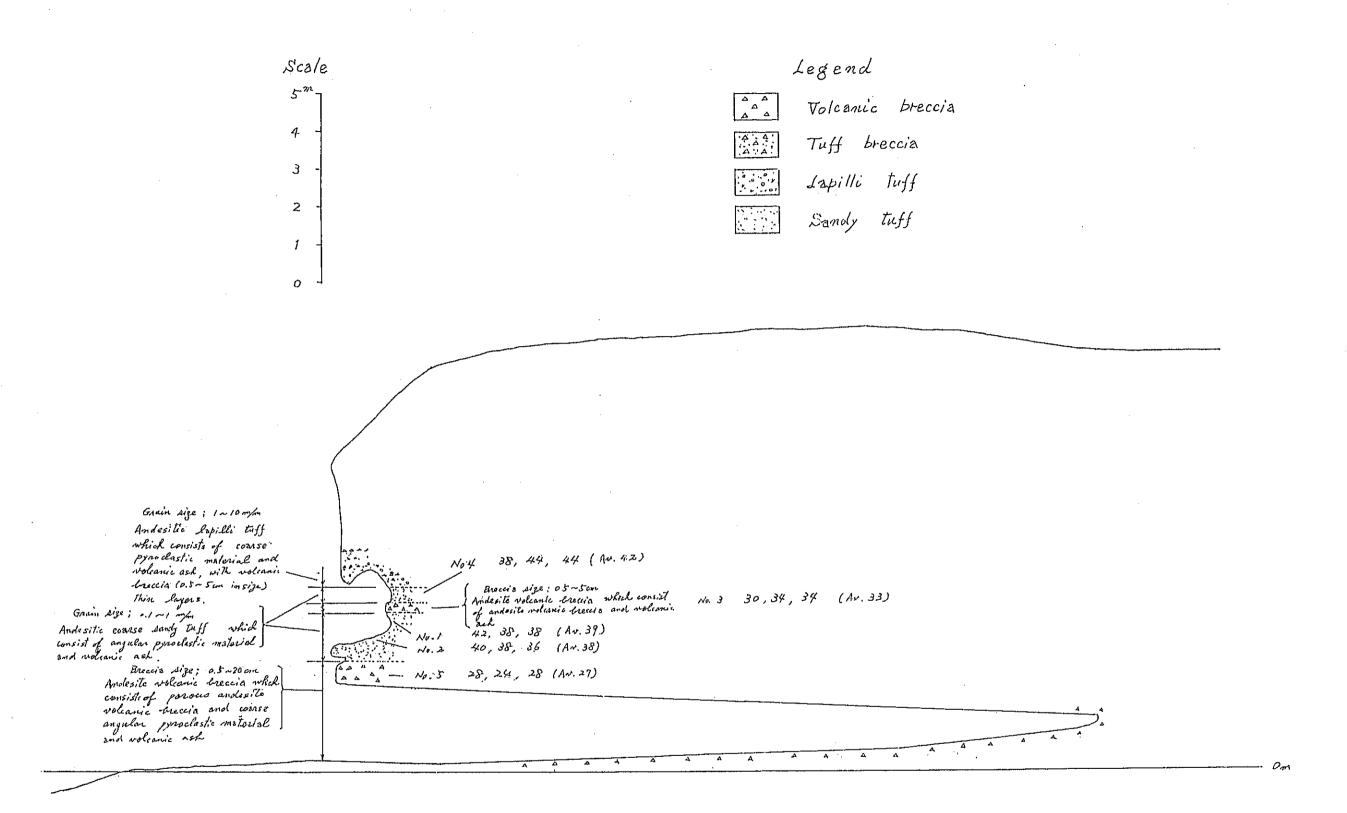


## GEOLOGICAL SECTION C-C'

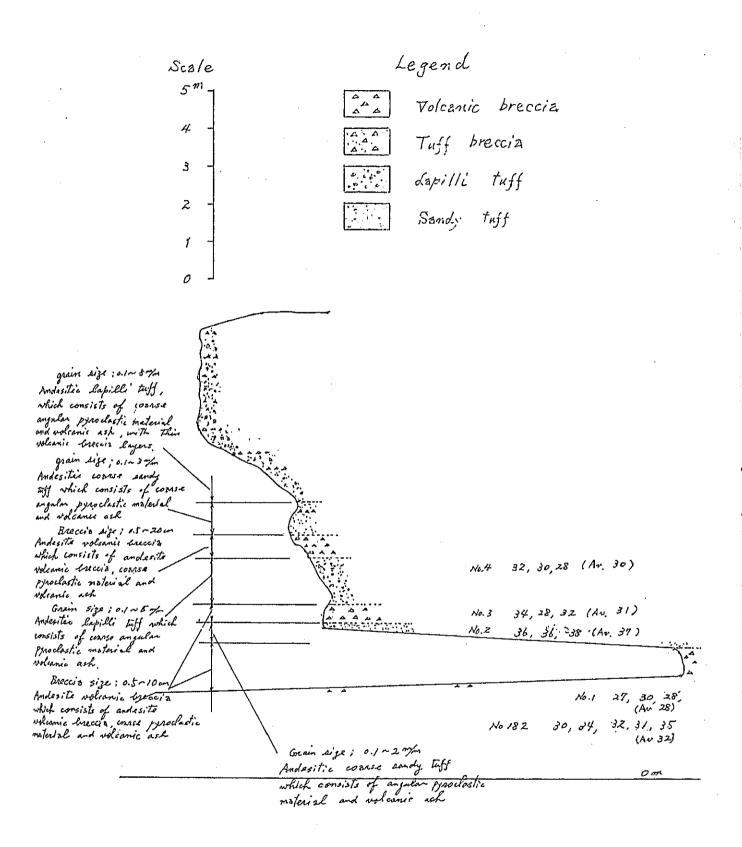


GEOLOGICAL SECTION D-D'

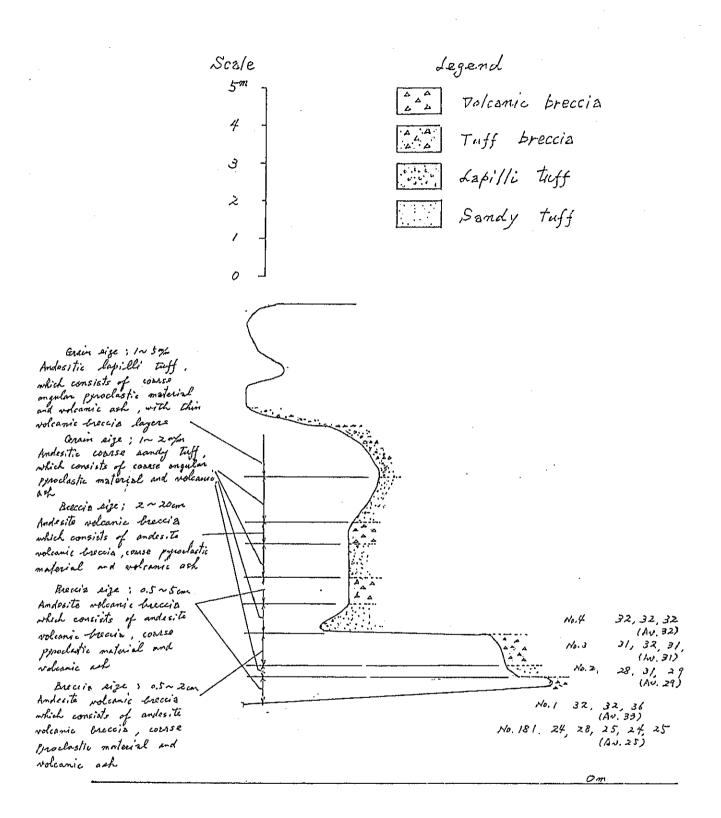




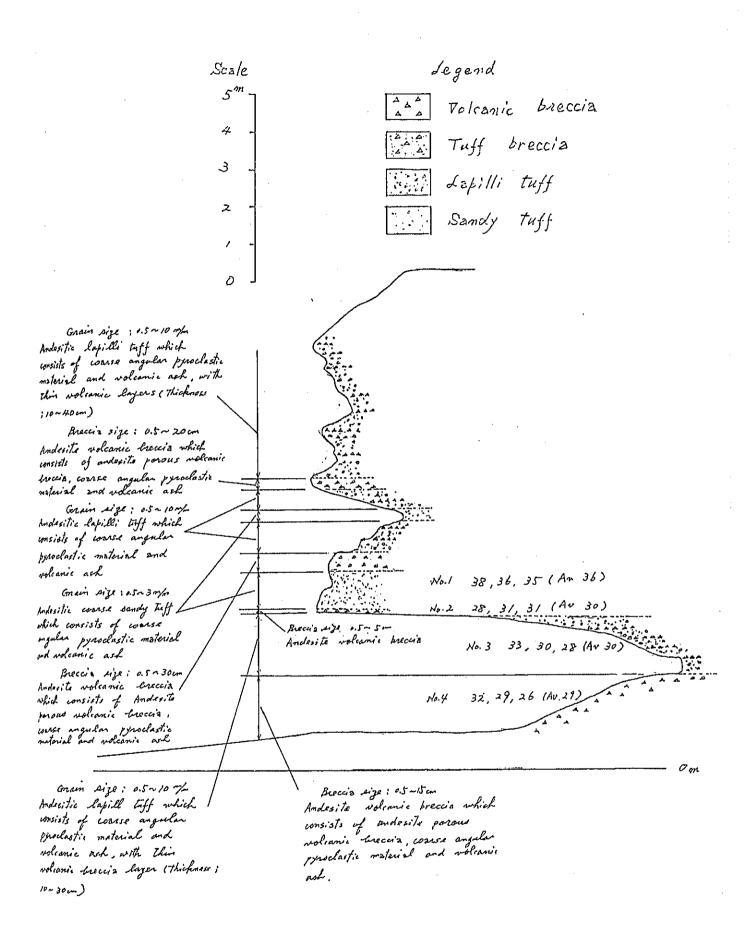
GEOLOGICAL SECTION F-F'



GEOLGICAL SECTION G-G'



GEOLOGICAL SECTION H-H'



GEOLOGICAL SECTION I-I'