

I-7. DREDGED MATERIAL

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Both types of dredge of the Honza-Kagami type chain-bay and cylinder bucket were attached at the end of a three meters length chain, and a lead weight of 210 kgms was attached at the front of the chain. The operation system of the dredges is given in KINOSHITA *et al.* (1975).

Dredge sites on the frontal slope of the Ryukyu Ridge were selected in order to sample the sedimentary layers on the continental slope at the front of the ridge. Sites in the Okinawa Trough were selected so as to collect basement rocks from the seamounts and hills. The dredge results are listed in Table I-1-4.

The biostratigraphy of calcareous nannoplankton fossils from dredged sedimentary rocks was studied by Mr. Makoto OKAMURA of the Geological and Paleontological Institute, Tohoku University, who assisted in the survey during the cruise. These results are listed in Table I-7-1.

Rocks dredged from the Onodera Seamount (D91) and from the trench slope break along the frontal slope (D92) were studied by Makoto YUASA of Geological Survey of Japan. These results are listed in Table I-7-2.

Table I-7-1 Analytical results of calcareous nannoplankton fossils
(by M. OKAMURA)

St.	Sample No.	Material	Zone	Age
190	P 23	medium grained tuffaceous sand	Emilianian huxleyi, NN 21	Recent
191	P 24	clay	ditto, NN 21	Recent
193	D 87	calcareous ooze	Pseudoemiliana lacunosa, NN 19	Pleistocene
194	D 88	clay	Discoaster asymmetricus, NN 14 Reticulofenestra pseudoumbilica, NN 15	lower Pliocene
195	D 89	clay	Emiliana huxleyi, NN 21	Recent
196	P 25	clay in graded bed	ditto, NN 21	Recent
197	D 90	clay	Reticulofenestra pseudoumbilica, NN 15	upper most part of lower Pliocene
198	P 26	clay	Reworked Reticulo. pseudo.	
199	D 91	tuffaceous siltstone	Discoaster pentaradiatus, NN 18 Discoaster brouweri	upper Pliocene
200	D 92	tuffaceous siltstone		middle Miocene
201	D 93	siltstone	no nannoplankton	
205	D 95	coarse grained sand	Emiliana huxleyi, NN 21	Recent
206	D 96	clay	ditto, NN 21	Recent
207	D 97	clay	ditto, NN 21	Recent

Table I-7-2 Rocks from the sampling sites of D 91 and D 92 (by M. YUASA)

Sample	No.	Rock	Mineral	Altered mineral	
D 91	1, 2	porphyrite	pl, q	chl. hematite. ser, cal vein	
	3	acidic tuff (metamorphosed?)	pl, q, ser, cal	q and cal vein	
	4, 5	tuff (metamorphosed?)	pl, q, ser, cal	q and cal vein	
	6	quartz-diorite	q, pl	ser, chl, clay cal vein	
	7	porphyrite	pl, q	cal, ser, chl	
	8	limestone		cal	
	9	andesite	pl, px,	chl. ser, cal and q vein	
	10, 11, 12	quartz-porphyrte	q, pl	amphibole, biotite cal vein	
	13	fine-grained quartz-porphyrte	pl, q	ser, cal and q vein	
	14	biotite-pyroxene hornfels		pl, q, diopside? biotite, cal and q vein	
	15	andesite	pl, hornblende?	ser, chl	
	16	quartz-diorite-porphyrte	pl, biotite hornblende, zircon rutile	ser, biotite hornblende	
	17, 18	slate		cal, ser, chl	
	19	siltstone		ser, chl	
	D 92	20	andesite	pl, q	ser, chl
		21	sandstone	pl, q	ser, chl, cal
21		sandstone	pl, q	ser, chl, cal	
1, 2		foraminiferal limestone			
3		andesite	pl, clino-px	pyrite and gypsum vein	
4		barite nodule	barite		

pl: plagioclase, q: quartz, cal: calcite, chl: chlorite, ser: sericite, px: pyroxene

A Reference Cited

- KINOSHITA, Y., MARUYAMA, S., HONZA, E., YAMAKADO, N., USAMI, T. and HANDA, K. (1975) Technical notes on deep sea bottom sampling, in A. MIZUNO ed., Deep sea mineral resources investigation in the eastern central Pacific basin. *Geol. Surv. Japan, Cruise Report*, no. 4, p. 49-61.