AREA B. SAN MIGUEL-SANTA ROSA ISLANDS AND SANTA ROSA-CORTES RIDGE TO CORTES BANK

N lat	W long	Depth (metres)	Description	Fossils	Sample and thin section designation
32°52.5' 840810	120°04.2' 642490	67	Claystone, silty, micaceous, calcareous; 5Y6/1; large angular fragments, moderately hard	Early or middle Miocene coccoliths	SCS 232
33°52.4' 835850	120°05.2' 642160	75	Siltstone, clayey with scattered volcanogenic sand grains; N5 to 5B6/1; hard; contains angular fragments of unaltered volcanic rocks	--	SCS 227 T-502
33°52.4' 842450	120°03.9' 642320	63	Siltstone, clayey, micaceous, calcareous; 5Y6/1; fractured, moderately hard	--	SCS 233
33°51.7' 742620	120°23.6' 641540	950	Claystone, diatomaceous; N8, 5Y6/1, 5Y4/1; laminated, low density; dip 26°	Late(?) Miocene diatoms	SCS 386
33°51.3' 744970	120°28.1' 639330	800	Claystone, diatomaceous, and diatomite; 5Y6/1, N8; laminated, minute fractures; very low density; dip 40-60°	Early or middle Miocene diatoms, silicoflagellates	SCS 385
33°50.6' 845270	120°03.2' 631250	97	Siltstone and fine-grained sandstone (marlstone), clayey, micaceous, calcareous; N7 and 5Y5/1; irregularly laminated, moderately hard; dip 27°	Early(?) Miocene coccoliths; Zemorrian benthonic, and late Oligocene planktonic foraminifers	SCS 235 T-511
33°50.4' 803200	120°11.5' 631800	315	Mica schist; 5B5/1; contains albite, chlorite, biotite, and muscovite(?)	--	SCS 371 T-470
33°50.5' 846360	120°03' 630550	95	Claystone, silty, micaceous, calcareous; 5Y6/1; mottled in part; massive, moderately hard	--	SCS 236
33°50.4' 847760	120°02.7' 629780	90	Siltstone and claystone, micaceous, calcareous; 5Y5/1; massive, fractured; pelecypod casts; moderately hard	Early (?) Miocene coccoliths; Zemorrian or Saucesian foraminifers	SCS 237
33°50.4' 849240	120°02.4' 629470	90	Siltstone, clayey, micaceous, calcareous; 5Y6/1; laminated, moderately hard	--	SCS 238
33°50.3' 850360	120°02.2' 629350	90	Claystone, silty, dolomitic(?); 5Y4/1 and 10YR6/2; brittle, hard	--	SCS 239
33°50.3' 853420	120°01.6' 629100	90	Siltstone, tuffaceous(?); 5Y6/1 to 5G6/1; massive, fractured, moderately hard	--	SCS 244
33°50.3' 861190	120°00.6' 628710	90	Pebble conglomerate, calcareous, large clasts round to subround, small clasts angular to subangular; clasts include dark metavolcanics, volcanics, serpentine, and chert; 5G2B/1 to 5G6/1	--	SCS 253 T-472
33°50.3' 860120	120°00.3' 628740	92	Claystone, silty, calcareous; 5Y4/1; massive, hard, brittle	Early(?) Miocene coccoliths; Saucesian or Relizian foraminifers	SCS 252
33°50.3' 858700	120°00.6' 628800	91	Claystone, silty, micaceous, tuffaceous(?), calcareous; 5Y6/1; massive; shattered, moderately hard	Early(?) Miocene coccoliths; probable lower Saucesian foraminifers	SCS 251
33°50.3' 857420	120°00.8' 628840	90	Siltstone, sandy, slightly micaceous, calcareous; 5GB/1; massive, indistinct parting at 15°±; moderately hard	--	SCS 250
33°50.3' 856150	120°01.1' 628890	91	Claystone, silty, micaceous; 10Y6/2; massive, intensely fractured, moderately hard	--	SCS 249
33°49.5' 732000	120°25.6' 628920	1130	Siltstone, clayey, calcareous; 5Y6/1 to 5G6/1; massive, low density, moderately hard	Probable Luisian foraminifers	SCS 388
33°39.6' 929490	119°46.1' 561150	700	Siltstone, clayey, micaceous; 5Y2/1; indistinctly laminated; streaked with glauconite and phosphorite pellets	Late Pliocene to Holocene foraminifers (contamination?)	SCS 280
33°39.7' 924470	119°47.1' 562010	540±	Claystone, silty, calcareous, phosphatic; N4, 5Y4/1, 5Y6/1; laminated; low density; dip 10-20°	Late Miocene coccoliths, silicoflagellates; upper Mohnian to Delmontian foraminifers	SCS 281
33°39.6' 885370	119°54.8' 562960	128	Siltstone, clayey, micaceous, calcareous; 5Y5/1; massive	Early(?) Miocene coccoliths, silicoflagellates; upper Saucesian foraminifers	SCS 305
33°39.6' 872180	119°57.4' 563460	135	Mudstone, micaceous, streaks of very fine-grained sandstone; 5Y6/1; massive, minute clay-filled fractures	Early(?) Miocene diatoms, silicoflagellates	SCS 325
33°39.5' 865260	119°58.8' 563280	127	Siltstone, clayey, micaceous, calcareous, sandy in part; N7; massive, moderately hard, intermediate density; contains mineral grains indicative of silicic plutonic source	Early Paleogene coccoliths; Bulitian or Penutian foraminifers	SCS 333 T-504
33°89.4'	118°59.2	129	Siltstone, sandy, feldspathic, micaceous; 5Y6/1; indistinctly laminated, hard, intermediate density	Paleocene coccoliths; Bulitian or Penutian foraminifers	SCS 255
33°39.5' 860170	119°59.8' 563130	120	Siltstone, clayey, micaceous; N5; massive, sheared, hard, intermediate density	Paleocene(?) coccoliths; probable Bulitian or Penutian foraminifers	SCS 258
33°39.5' 858430	120°00.3' 563150	127	Siltstone, clayey, and sandstone, feldspathic, very fine grained, micaceous; N7 and N5; shattered, moderately hard, intermediate density	--	SCS 260 T-512
33°39.5' 852950	120°01.2' 563170	303	Claystone, diatomaceous, calcareous; 5Y6/1 to 5Y4/1; indistinctly laminated, minute clay-filled fractures; dip 9°	Middle Miocene coccoliths and silicoflagellates; Mohnian foraminifers	SCS 268
33°39.4' 851390	120°01.5' 562940	502	Claystone, calcareous; 5Y6/1, 5Y4/1, N3; laminated, phosphatic(?), low density; dip 10-15°	Upper Mohnian foraminifers	SCS 269
33°21.1' 987190	119°34.0' 447020	95	Tuff, glassy, pumiceous; 5Y8/1; unaltered, acidic	--	KZ 73-1-9A T-560
33°21.0' 982250	119°35.0' 447050	97	Siltstone, clayey, micaceous, fractured; 5Y7/2; massive, moderately hard, fractured; sandstone, feldspathic, very fine grained, micaceous; 5Y7/4; friable	Late Oligocene? coccoliths	KZ 73-1-10
32°20.0' 966480	119°38.1' 441250	75	Sandstone, very fine grained, feldspathic, micaceous; 5Y7/1; fragments only	Eocene(?) foraminifers	KZ 73-1-17 T-550
33°19.0' 955960	119°40.1' 435530	70	Sandstone, fine to medium grained, micaceous, fairly well sorted; 5Y7/1; weakly calcareous; mineral and rock fragments indicative of silicic plutonic with altered volcanics	--	KZ 73-1-21 T-551
33°15.0' 909590	119°49.0' 412990	97	Sandstone, medium to coarse grained, micaceous feldspathic; 5Y8/1; rock fragments and mineral grains indicative of silicic plutonic source	--	KZ 73-1-37 T-552
33°15.2' 904740	119°50.0' 414490	87	Sandstone, fine to medium grained, micaceous, feldspathic; 5GY7/1; poorly sorted; rock fragments and mineral grains indicative of silicic plutonic source	--	KZ 73-1-38 T-553
33°14.0' 1046710	119°22.1' 402530	48	Siltstone, sandy, micaceous, feldspathic; 5GY7/2; matrix diagenetically altered; clast composition similar to that of known Eocene sandstone	Eocene(?) foraminifers	KZ 73-2-11B T-555
33°14.0' 1041810	119°23.0' 402550	37	Siltstone, micaceous; 5Y6/1; massive, moderately hard,	Probable Eocene foraminifers, possibly as young as Narizian-Refugian	KZ 73-2-12 T-349
33°13.1' 1036750	119°24.0' 397060	30	Claystone, silty, micaceous; N5; moderately hard brittle	Eocene foraminifers	KZ 73-2-13 T-350
33°13.0' 883910	119°54.0' 401870	422	Mudstone, silty, micaceous; 5Y4/1; occurs as abundant small, rounded pebbles in Quaternary sediment	--	KZ 73-1-46 T-554A, B
33°03.1' 1009200	119°29.0' 337300	530	Claystone, silty, calcareous, highly fossiliferous; 5Y5/1; massive, moderately hard, low density	Late Miocene coccoliths; upper Mohnian foraminifers	KZ 73-2-46 T-441
33°06.0' 974130	119°36.0' 356180	297	Claystone, silty, calcareous; 5Y4/1; low density	Probable upper Mohnian foraminifers	KZ 73-2-39
33°05.1' 968950	119°37.0' 350580	290	Claystone, silty, calcareous; 5Y8/1; soft, low density	--	KZ 73-2-41
32°59.5' 999970	119°30.7' 316000	413	Claystone, silty, calcareous; 5Y6/1; massive, hard; carbonate cement, low density	--	SCS 7
32°59.2' 997080	119°31.3' 313840	365	Claystone, silty, calcareous; 5Y6/1 to 5Y8/1; few indistinct laminae, low density	Late Miocene coccoliths; upper Mohnian foraminifers	SCS 10
32°57.3' 984400	119°33.7' 303060	428	Claystone, silty, calcareous; 5Y5/2; pumice fragments to 2 mm, massive, low density	Upper Mohnian foraminifers	SCS 15
32°57.2' 983760	119°33.8' 302170	465	Claystone, silty; 5Y6/1; massive, calcareous and manganiferous(?) cement, low density	Lower Mohnian foraminifers	SCS 16
32°57.12' 983110	119°33.92' 301900	484	Claystone, silty; 5Y6/1 and N2; laminated; carbonate cement; zones of dead oil(?); low density; possible 10 to 20° dip	Middle or late Miocene coccoliths; Lower Mohnian foraminifers	SCS 17
32°56.6' 979360	119°34.6' 298710	585	Claystone, calcareous; N7 to 5Y6/1; massive, low density	Late Miocene coccoliths; lower Mohnian foraminifers	SCS 21
32°55.9' 1069080	119°17.1' 291560	677	Claystone(?), silty; 5Y6/1 and 5Y4/1; laminated, glauconitic, crystalline carbonate	--	SCS 32
32°55.1' 1003400	119°29.9' 289250	354	Claystone, calcareous; 5Y6/1; massive, low density	Late Miocene coccoliths; upper Mohnian foraminifers	SCS 67
32°54.8' 966980	119°37.0' 288110	818	Claystone, diatomaceous; N7; pumiceous(?) highly fractured; tuff layer near top of core; very low density	Middle Miocene silicoflagellates	SCS 25
32°54.5' 965220	119°37.3' 286680	855	Claystone, silty, calcareous, diatomaceous; N6 and N8; laminated, very low density; good 15° dip	Middle Miocene coccoliths and silicoflagellates; lower Mohnian foraminifers	SCS 27
32°54.4' 964370	119°37.5' 286230	885	Claystone, calcareous diatomaceous; N7 and N8; laminated, fractured; steep dip; very low density	Middle Miocene coccoliths; diatoms, silicoflagellates; lower Mohnian foraminifers	SCS 28
32°54.0' 1022930	119°26.0' 282030	122	Tuff, glassy, very fine grained, equigranular; 5GY4/1; dense; some zeolite(?) cement (inaccurately described in MF-624)	--	KZ 73-3-7 T-561A T-561B
32°52.0' 1063490	119°18.0' 268500	518	Claystone, silty, micaceous, calcareous; 5Y4/1, 5Y6/1; mottled, low density	Middle Miocene coccoliths; lower Mohnian foraminifers	KZ 73-4-2
32°50.9' 1017030	119°26.1' 263060	350	Claystone, silty, micaceous, calcareous; N4, 5Y4/1; mottled; massive, low density	Late middle or late Miocene coccoliths; Mohnian foraminifers	SCA 474
32°50.3' 1020910	119°26.3' 259410	370	Siltstone, clayey, micaceous; fragmented; 5G6/1	Late Eocene or early Oligocene coccoliths; Refugian foraminifers	SCA 472
32°50.0' 1063490	119°23.0' 268500	130	Claystone, silty, micaceous, calcareous; 5Y4/1, 5Y6/1; mottled, low density	Early Miocene coccoliths; lower Mohnian foraminifers	KZ 73-4-11
32°49.0' 1027080	119°25.0' 251570	338	Claystone, silty, calcareous; 5Y4/1; scrapings from core barrel	Late Miocene(?) coccoliths	KZ 73-4-15
32°48.5' 1076260	119°15.4' 246910	536	Claystone, silty, diatomaceous, calcareous; 5Y4/1 to 5Y6/1; laminated, very low density	Probable lower Luisian foraminifers	SCS 112
32°46.8' 1082970	119°14.0' 236380	315	Claystone, silty, pelletal, phosphatic; 5Y4/1 to 5Y6/2; hard, fractured	Late Miocene foraminifers	SCA 5
32°46.7' 1065500	119°17.4' 236380	402	Claystone, diatomaceous, tuffaceous, calcareous; 5Y6/1 and 5Y5/2; laminated; fractured (filled); very low density; dip 20-25°	Middle Miocene coccoliths and silicoflagellates; lower Luisian foraminifers	SCS 117
32°46.4' 1063140	119°17.9' 234230	421	Claystone, calcareous; 5Y8/1 and 5Y6/1; indistinctly laminated; vitric tuff layers to 4 mm (N9); low density; dip 5° to 25° (deformed in part)	Middle Miocene coccoliths; Mohnian foraminifers	SCS 118
32°46.3' 1102800	119°10.2' 232910	355	Siltstone, clayey, micaceous, calcareous; 5Y6/1; low density; intermixed with Quaternary sand	Late middle or late Miocene coccoliths; upper Mohnian foraminifers	SCS 225
32°46.3' 1103800	119°10.0' 232340	370	Claystone, silty, tuffaceous, calcareous; 5Y4/1; laminated, low density; contains unaltered glass shards	Upper Mohnian foraminifers	SCA 226
32°45.9' 1118910	119°06.10' 229630	595	Claystone, silty, calcareous; 5Y6/1 and 5Y4/1; laminated, deformed, low density	Middle or late Miocene foraminifers	SCS 101
32°45.9' 1061610	119°18.2' 231440	474	Claystone, silty, calcareous, diatomaceous; 5GY6/1 to 5GY4/1; indistinctly laminated, minute filled fractures; low density; dip 22°±	Early(?) Miocene coccoliths and silicoflagellates; lower Luisian foraminifers	SCS 119
32°45.7' 1077530	119°15.1' 229920	242	Claystone, silty, micaceous, diatomaceous, calcareous; 5Y5/1; low density	Late middle or late Miocene coccoliths, diatoms, silicoflagellates; Relizian foraminifers	SCA 14
32°45.6' 1117020	119°07.3' 228000	445	Claystone, silty, calcareous; 5Y4/1; massive, low density	Late middle or late Miocene coccoliths; upper Mohnian foraminifers	SCA 285
32°45.6' 1118590	119°07.0' 227890	490	Siltstone, clayey, micaceous, calcareous; 5Y5/1; massive, fractured	Middle Miocene coccoliths; upper Mohnian foraminifers	SCA 286
32°45.6' 1116430	119°07.5' 227730	472	Claystone, pelletal, calcareous; 5Y6/1 and 5Y4/1; thin laminae of vitric tuff; low density; 0-10° dip	Late Miocene coccoliths; upper Mohnian to Delmontian foraminifers	SCS 100
32°45.2' 1058340	119°18.8' 227090	465	Claystone, calcareous, tuffaceous(?), diatomaceous; 5Y8/1 to 5Y4/1; laminated, microfractures; low density; dip 25-27°	Early(?) Miocene coccoliths and silicoflagellates; lower Luisian foraminifers	SCS 121
32°45.2' 1114550	119°07.8' 225380	352	Claystone, silty, calcareous; 5Y6/1; massive, low density	Middle Miocene coccoliths; late Miocene or early Pliocene foraminifers	SCS 99
32°44.6' 1102780	119°10.1' 222390	90	Siltstone, clayey, micaceous, dolomitic(?) cement; 5Y7/2; hard, fractured; calcareous microfossils leached	--	SCA 71
32°44.4' 1110680	119°08.5' 221080	100	Claystone, silty, diatomaceous, calcareous; 5Y6/1; massive, faintly mottled, compact; low density	Zemorrian(?) foraminifers	SCS 97
32°43.9' 1130190	119°04.7' 216870	440	Siltstone, clayey, diatomaceous, micaceous; 5Y5/1; massive, low density	Middle Miocene coccoliths, diatoms, silicoflagellates; lower Repettian or latest Miocene foraminifers	SCA 171
32°43.7' 1049470	119°20.5' 218330	770(?)	Claystone, silty, calcareous; N6 to 5Y6/1; indistinctly laminated, low density; dip <5°	Middle Miocene coccoliths; lower Luisian foraminifers	SCS 125
32°43.1' 1044590	119°21.4' 214760	674	Claystone, calcareous, diatomaceous; 5Y6/1 and 5Y4/1; indistinctly laminated, deformed; low density; dip 5-20°	Middle Miocene coccoliths; Luisian foraminifers	SCS 127
32°42.8' 1042030	119°21.9' 213420	655	Claystone, silty, calcareous, contains phosphorite(?) blebs; 5Y6/1 and 5Y4/1; massive, low density	Late Miocene coccoliths; upper Mohnian foraminifers	SCS 128
32°42.3' 1036680	119°22.9' 210370	710	Claystone, calcareous, phosphorite(?) blebs; N5 to N3; indistinctly laminated; minute cemented fractures; dip 5°±	Middle Miocene coccoliths; Mohnian foraminifers	SCS 130
32°42.5' 1100760	119°10.4' 209640	75	Siltstone, clayey, micaceous, calcareous; 5Y6/1; massive, relatively hard	Early(?) Oligocene coccoliths; Refugian foraminifers	SCS 92
32°42.1' 1034020	119°23.4' 209100	735	Claystone, calcareous; N6, N4, 5Y6/1; laminated, phosphatic(?)	Middle Miocene coccoliths; Relizian or lower Luisian foraminifers	SCS 131
32°42.1' 1098480	119°10.8' 207230	75	Augite olivine basalt, alkaline; 5Y4/1; contains ilmenite and secondary apatite; questionably in place	--	SCS 91 T-503
32°41.8' 1031610	119°23.9' 207610	810	Claystone, calcareous, tuffaceous(?); between 5Y7/1 and 5Y6/1; massive with phosphatic(?) blebs to 2 mm; low density	Late(?) Miocene coccoliths; upper Mohnian foraminifers	SCS 132
32°41.4' 1095310	119°11.4' 203020	110	Claystone, silty, calcareous; 5Y7/1 and 5GY6/1; laminated; minute filled fractures; phosphorite(?)blebs and streaks; low density; 5°± dip	Late Miocene coccoliths; upper Mohnian foraminifers	SCS 89
32°41.3' 1117010	119°07.2' 201910	47	Augite diabase, subophitic; 5Y5/2; contains altered olivine	--	SCS 80 T-490
32°41.2' 1111210	119°08.3' 201340	60	Augite basalt, subophitic, alkaline; 5Y4/1; altered olivine, plagioclase (An_{40-50}); contains ilmenite and secondary apatite	--	SCS 81 T-500
32°41.0' 1119340	119°06.7' 200350	60	Basalt, vesicular; 5Y4/1; ferromagnesian minerals altered; contains some interstitial augite	--	SCS 79 T-491
32°38.6' 1034060	119°23.3' 187990	585	Claystone, silty, calcareous; 5Y6/1 and 5Y4/1; indistinctly laminated, deformed, low density	Middle or late Miocene coccoliths; lower Mohnian foraminifers	SCS 142
32°38.4' 1032500	119°23.6' 187050	622	Claystone, calcareous; N7, 5Y6/1, 5Y4/1; laminated, minute cemented fractures; dip 25°±; low density	Middle Miocene coccoliths; probable lower Mohnian foraminifers	SCS 143
32°38.1' 1029810	119°24.2' 184920	720	Claystone, silty, calcareous; 5Y6/1; massive; minute clay-filled fractures; low density	Middle(?) Miocene coccoliths; lower Luisian foraminifers	SCS 144
32°36.7' 1125970	119°05.3' 173560	265	Claystone, silty, calcareous; 5Y6/1; low density	Middle Miocene coccoliths and silicoflagellates; upper Luisian foraminifers	SCA 343
32°36.6' 1126150	119°05.3' 173520	265	Siltstone, clayey, calcareous; 5Y4/1;	Middle Miocene coccoliths and diatoms; lower Mohnian foraminifers	SCA 344
32°36.2' 1034050	119°23.2' 173390	490	Claystone, silty, calcareous; 5Y4/1; low density	Middle Miocene coccoliths; lower Mohnian foraminifers	SCA 35
32°35.9' 1036210	119°22.8' 171290	420	Claystone, silty, micaceous; calcareous; 5Y4/1, 5Y2/1; indistinctly banded; low density	Late Miocene coccoliths; upper Mohnian foraminifers	SCA 36
32°36.0' 1111650	119°08.1' 169950	160	Claystone, silty, calcareous; 5Y6/1; scrapings from core barrel	Middle or late Miocene coccoliths	KZ 73-6-16
32°34.3' 1046550	119°20.7' 167740	120	Claystone, silty, micaceous, calcareous; 5Y4/1; low density	Late Miocene coccoliths; upper Mohnian foraminifers	SCA 258
32°35.1' 1106570	119°09.0' 164380	170	Claystone, silty, and siltstone, clayey, micaceous; 5Y4/1, 5Y6/1; indistinctly laminated	Mohnian foraminifers	KZ 73-6-17A
32°33.0' 1100940	119°10.1' 152350	181	Claystone, silty, calcareous, highly fossiliferous; N5, 5Y6/1; indistinctly laminated, low density	Late Miocene(?) coccoliths; upper Mohnian foraminifers	KZ 73-6-22 T-444
32°33.0'	119°20.1'	115	Siltstone, clayey, and claystone, silty; micaceous; 5GY6/1; ellipsoidal fracture, moderately hard	Early Eocene coccoliths	KZ 73-5-34 T-380
32°32.0' 1039500	119°22.0' 147760	330	Claystone, calcareous; 5Y6/1; scrapings from core barrel	Late Miocene(?) coccoliths; upper Mohnian foraminifers	KZ 73-5-37
32°31.0' 1039020	119°22.1' 141950	475	Claystone, silty, micaceous, highly fossiliferous; 5Y4/1; massive, low density	Middle or late Miocene coccoliths; probably Relizian foraminifers	KZ 73-5-39 T-407
32°29.9' 1054570	119°19.0' 134350	410	Siltstone, clayey micaceous, calcareous; 5Y4/1; low density	Late Miocene coccoliths; upper Mohnian foraminifers	SCA 133
32°29.8' 1055720	119°18.7' 133660	420	Claystone, silty, calcareous, N6; low density	Late middle Miocene coccoliths; upper Mohnian foraminifers	SCA 134
32°29.0' 1079590	119°14.9' 128380	75	Olivine diabase, porphyritic and subophitic; 10YR4/2; includes titaniferous augite, oxyhornblende ilmenite, apatite	--	KZ 73-6-33 T-556
32°28.3' 1145090	119°01/3' 122350	332	Claystone, silty, micaceous, calcareous; 5Y2/1 to 5Y6/1 in irregular color bands; phosphorite pellets in light bands	Late middle or late Miocene coccoliths; upper Mohnian foraminifers	SCA 422
32°27.3' 1105410	119°09/2' 115710	58	Plagioclase-rich diabase, porphyritic, vesicular, altered; 5YR5/2; phenocrysts to 0.8 mm; abundant opaque minerals; questionably in place	--	KZ 73-7-36 T-557
32°27.0' 1069330	119°16.0' 116550	320	Sandstone, lithic, calcareous, very fine to fine grained; 5Y5/1; friable, massive, contains basic volcanic rock detritus	--	KZ 73-6-37 T-564
32°26.1' 1069120	119°16.0' 111030	430	Claystone, calcareous; 5Y6/1; scrapings from inside and outside of core barrel	Middle Miocene coccoliths; Mohnian foraminifers	KZ 73-6-38

AREA C. SANTA CRUZ ISLAND SOUTHEAST TO SANTA CATALINA AND SAN CLEMENTE ISLANDS

N lat	W long	Depth (metres)	Description	Fossils	Sample and thin section designation
33°52.9' 1045140	119°23.8' 638680	660	Sand, fine to very coarse grained; pebbly, semi-consolidated; 5Y4/1 stained 10YR5/4; angular to subrounded lithic fragments to 1 cm include volcanic rocks, schist, and quartz; some carbonate cement(?), glauconite pellets	--	SCS 4
32°43.0' 1343810	118°23.0' 207000	425	Claystone, silty, micaceous, manganiferous; 5Y6/1, N3	Miocene, undifferentiated, foraminifers	KZ 73-9-2
32°42.1' 1333080	118°25.1' 201400	363	Claystone, silty, micaceous, calcareous; highly fossiliferous; 5Y6/1, 5Y8/1, mottled, indistinctly laminated, low density	Late Miocene coccoliths; Mohnian foraminifers	KZ 73-9-8
32°42.1' 1328160	118°26.0' 201500	303	Claystone, silty, micaceous, calcareous; 5G8/1, 5G6/1; mottled, low density	Middle Miocene coccoliths; upper Relizian or lower Luisian foraminifers	KZ 73-9-9
32°40.1' 1271710	118°37.0' 190730	740	Claystone, silty, micaceous, calcareous; 5Y6/1, 5Y4/1, mottled; bioturbated, low density	Middle Miocene coccoliths; upper Mohnian to Delmontian foraminifers	KZ 73-9-28

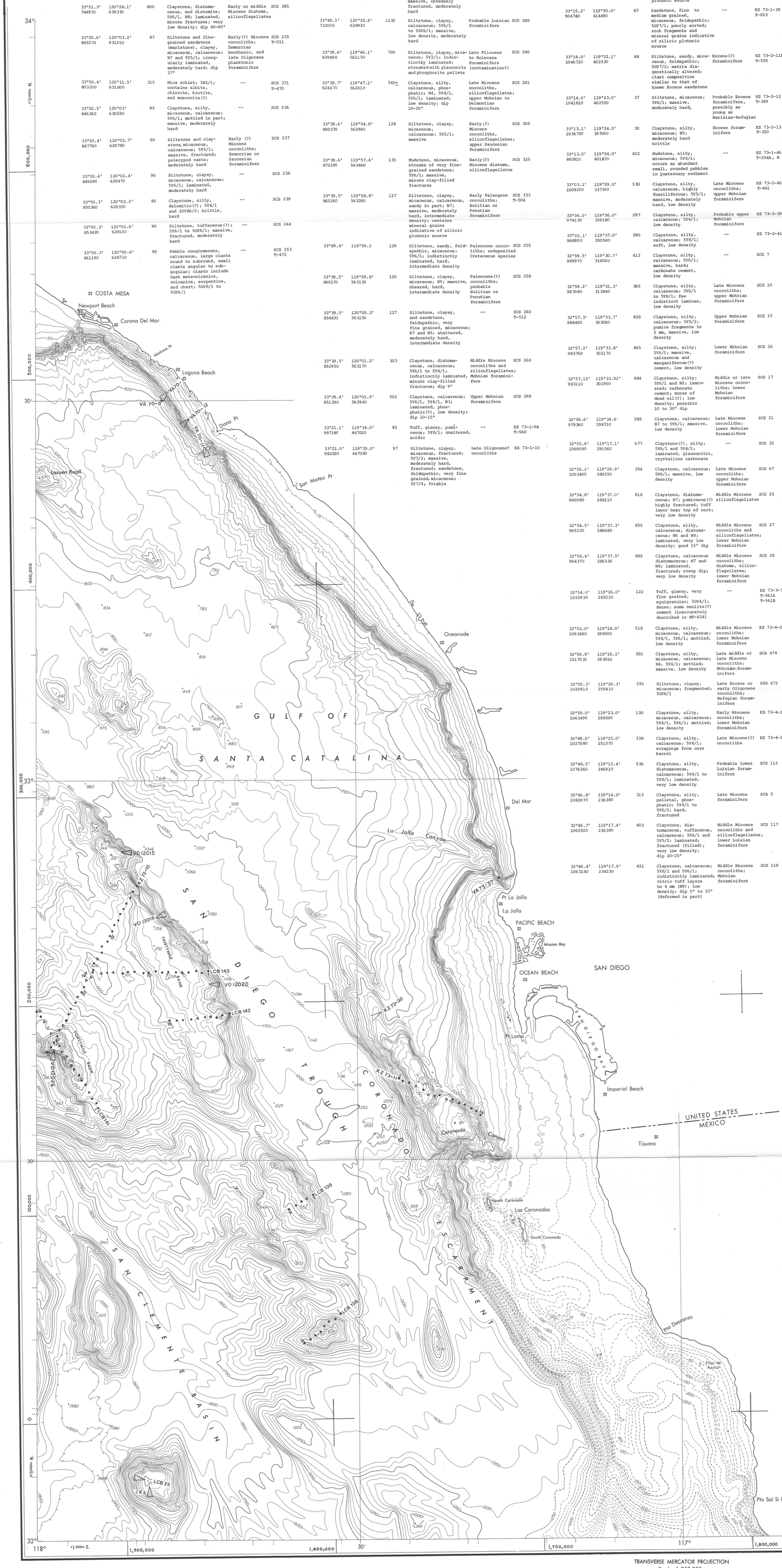
AREA D. THIRTYMILE AND FORTYMILE BANKS AND VICINITY

N lat	W long	Depth (metres)	Description	Fossils	Sample and thin section designation
32°51.8'	117°16.5'	46-140	Siltstone, sandy; weakly calcareous; 5Y2/1 (wet); moderately well-indurated	Late Cretaceous coccoliths; Campanian, possibly upper Campanian, foraminifers	VA 73-37
32°48.0' 1502920	117°52.1' 234400	620	Siltstone and very fine-grained sandstone, micaceous, calcareous; 5Y6/1, 5Y4/1; massive	Probable late Pliocene foraminifers	KZ 73-10-8
32°47.1' 1502720	117°52.1' 228710	615	Siltstone and very fine-grained sandstone, micaceous, calcareous; 5Y6/1, 5Y4/1; massive	Probable late Pliocene foraminifers	KZ 73-10-9
32°47.0' 1497950	117°53.0' 228420	580	Sandstone, very fine grained, silty, micaceous, calcareous; 5Y8/1 to 5Y4/1; bioturbated	Late Pliocene or Pleistocene foraminifers	KZ 73-10-11
32°35.0' 1655710	117°22.1' 153440	145	Siltstone, clayey, micaceous, diatomaceous; 5Y8/1, 5Y6/1; indistinctly laminated, clay-filled fractures; low density	Late Miocene diatoms; upper Mohnian foraminifers	KZ 73-11-8 T-445
32°34.0' 1671 30	117°19.0' 147330	140	Sandstone, very fine grained, feldspathic, micaceous; N7; massive, friable; contains abundant shell fragments	Pliocene or early Pleistocene mollusks	KZ 73-11-13
32°33.1' 1676230	117°18.0' 141460	101	Sandstone, very fine grained, feldspathic, micaceous; N7 and 10Y5/2; massive, friable; contains abundant shell fragments	Late Pliocene or early Pleistocene mollusks	KZ 73-11-15

AREA E. SIXTYMILE BANK AND VICINITY

N lat	W long	Depth (metres)	Description	Fossils	Sample and thin section designation
32°22.1' 1320480	118°27.0' 80420	412	Claystone, silty, micaceous, calcareous; 5Y4/1; scrapings from core barrel	Middle Miocene coccoliths	KZ 73-13-2
32°21.6'	118°17.4'	332	Mudstone, sandy, calcareous; fragmented; contains clasts of augite-bearing basic volcanic rocks and altered basaltic glass	--	KZ 73-12-6 T-562
32°21.4'	118°18.0'	300	Schist fragments in mudstone; 5GY6/1; include tremolite schist, epidote-muscovite schist, green amphibole-quartz schist, hornblende schist	--	KZ 73-12-7 T-563

1/Recorded depths may not match bathymetric contours on the maps because of navigation imprecision on old surveys.



Bathymetry compiled from C & GS hydrographic surveys dated 1922 to 1944 supplemented by hydrographic information from other sources. C & G.S. 1206 N-16

Universal Transverse Mercator Grid, Zone II 10,000 meter ticks (---) are shown on the neatlines.

Bathymetric contour intervals: 10 meters to the 200 meter depth, 50 meters to maximum depth. Datum MLLW.

ELEVATIONS (in meters)

- Islets above mean high water
- (6) Heights above mean high water
- 1 Heights above mean lower low water

TRANSVERSE MERCATOR PROJECTION
Scale 1:250,000

5 0 5 10 15 20 Statute Miles
5 0 5 10 15 20 25 30 Kilometers
5 0 5 10 15 Nautical Miles

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EXPLANATION

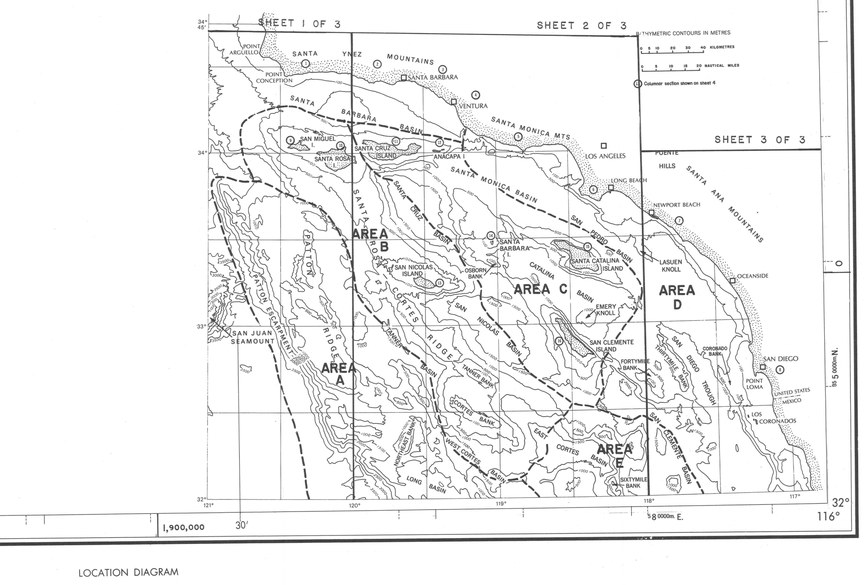
Symbol	Ship	Date	Type of Sampling	Type of Navigation
VO	R/V VELERO	March 1968	Dredge	Radar
CB	R/V MELVILLE	Feb. 1970	Dredge	--
VO	R/V VELERO	Feb. 1970	Dart core, dredge	Radar
VA	R/V VANTUNA	April 1970	Dart core, dredge	Radar
BART	R/V BARTLETT	Nov. 1972	Dredge	Satellite & Radar
KSB	R/V KELEZ	June and Sept. 1973	Dart core, dredge	R.P.S. & Radar
KZ	R/V KELEZ	Sept. and Oct. 1973	Dart core, dredge	R.P.S
LCB	R/V LEE	April and May 1974	Dart core, dredge	Raydist
SCS	R/V LEE	Nov. 1974	Dart core, dredge	Radar
SCA	R/V VELERO	May 1975	Dart core, box core, gravity core	R.P.S. & Raydist

● Core site, sample obtained

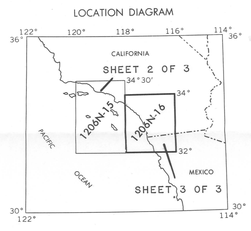
▲ Core site, sample not obtained

Dredge site, position approximate, apex of triangle indicates approximate ship heading

Lambert Zone 6 X,Y coordinates shown in map margins, and intersections at every 200,000 ft intervals.



LOCATION DIAGRAM



MAP SHOWING LOCATION OF SELECTED PRE-QUATERNARY ROCK SAMPLES FROM CALIFORNIA CONTINENTAL BORDERLAND

by

J.G. Vedder, J.C. Taylor, R.E. Arnal, and David Bukry

1976