

**DIS: Data-Report**

**Smear Slides Summary**

**Expedition: 381 Site: 78 Hole: A**

Core	Sec.	Smear Slide	Distance To Top (cm)	Distance To Bottom (cm)	Top Depth (mbsf)	Top Depth (mcd)	Lith.	Sand (%)	Silt (%)	Clay (%)	Description /Comments
1	2	1	115	116	2.64	2.64	D	0	70	30	Biogenic-Calcareous clayey silt Poorly sorted, subangular to subrounded grains Dominant presence of biogenic calcite and other biogenic fragments Quartz and mica are abundant. Common presence of other detrital lithics and black (organic?) components.
6	3	1	12	13	14.25	14.25	D	0	60	40	Biogenic-Calcareous clayey silt Poorly sorted, subangular to subrounded grains Dominance of biogenic calcite grains. Abundant quartz and mica. Plagioclase grains, terrestrial lithic components and black organic(?) material are common
8	2	1	91	92	19.18	19.18	D	5	80	15	Biogenic-Calcareous silt Very poorly sorted, subangular to subrounded grains. Dominant presence of biogenic calcite. Foraminifera individuals. Abundant quartz grains. Common flocculated clay-sized particles, iron oxides (pyrite?) and other lithic components
26	2	1	114	115	70.12	70.12	D	0	65	35	Detrital clayey silt Poorly sorted, mainly subrounded grains Dominance of quartz and plagioclases. Abundant calcite Fragments of diatoms are common Common presence of iron oxides (pyrite?), mica and flocculated clay sized particles
30	3	1	20	21	81.35	81.35	D	0	90	10	Detrital silt Poorly sorted, subrounded grains Abundant quartz, feldspars, calcite and terrestrial(?) organic components. Unidentified lithic fragments are common No microfossil fragments

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31	4	1	29	30	85.68	85.68	M	0	55	45	Detrital clayey silt (almost equilibrium between silt-clay) Poorly sorted, subrounded grains Sampled from a thin black organic layer within the CC sample (Minor Lithology) Dominant black amorphous (organic?) material. Abundance of quartz and calcite (less than quartz)
36	4	1	13	14	105.94	105.94	D	0	95	5	Calcareous silt Moderately to well sorted, subrounded grains Majority of elongated mineral grains (aragonite needles?) ~85% Common presence of: *diatom fragments *detrital calcite *well rounded quartz grains (~50 microns) *minor mica flakes
47	3	1	17	18	139.1	139.1	D	5	75	20	Detrital silt Poorly sorted, subrounded grains Dominance of detrital calcite and other terrestrial components. Biogenic calcite is abundant
51	3	1	17	18	152.87	152.87	D	55	30	15	Detrital silty sand Very poorly sorted, subangular to subrounded grains Dominance of sand-sized terrigenous lithic grains. Common proportion of quartz, detrital calcite and black organic(?) components
62	5	1	26	27	184.7	184.7	D	0	30	70	Biogenic-Calcareous silty clay Moderately sorted, subrounded grains Dominance of biogenic calcite Abundant presence of nannos and foraminifera individuals. Other common components include: Quartz, feldspars and minor aragonite needles and flocculated clay sized materials
64	2	1	18	19	186.16	186.16	D	0	30	70	Biogenic-Calcareous silty clay Moderately sorted, subrounded grains Dominance of biogenic calcite Abundant presence of foraminifera individuals and fragments. Other common components include: Quartz, feldspars and minor aragonite needles and flocculated clay sized materials

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88	4	1	14	15	239.01	239.01	D	0	30	70	Biogenic Calcareous silty clay Moderate to well sorted, subrounded grains Abundance of biogenic Calcite. Terrestrial components are common and include quartz, plagioclases and minor quantity of other lithics
89	5	1	10	11	245.24	245.24	D	0	70	30	Biogenic Siliceous clayey silt Moderate to well sorted, subrounded grains Dominance of marine diatoms Equilibrium between terrestrial and biogenic components
94	3	1	147	148	264.36	264.36	M	0	60	40	Detrital clayey silt Sampled from a dark gray/black layer within the original sample (minor lithology). Moderately sorted, subrounded grains Abundance of quartz, feldspars and other lithic fragments Despite dark coloured, only ~10% black organic components (common)
103	2	1	11	12	297.62	297.62	D	0	60	40	Biogenic Calcareous clayey silt Moderate to well sorted, subrounded grains Dominant presence of biogenic calcite detrital calcite, quartz, feldspars and micas are common Rare presence of heavy minerals and fe-mn micronudules?
121	4	1	12	13	366.8	366.8	D	5	75	20	Biogenic Siliceous silt Poorly sorted, subangular to subrounded grains Major presence of biogenic components (forams, nannos, marine diatoms & silicoflagellates) with silica bios being the most dominant Abundant biogenic calcite. Common presence of quartz and feldspars
125	4	1	1	2	387.71	387.71	D	0	60	40	Detrital clayey silt Well sorted, mainly subrounded grains Major presence of detrital calcite. Common presence pf quartz, plagioclases and rare heavy minerals, Fe-Mn micronudules? No biogenic components
141	5	1	9	10	459.58	459.58	D	0	60	40	Detrital(?) clayey silt Well sorted, mainly rounded grains Dominance of detrital calcite Increase of quartz (abundant). Rare to common presence of pyrite? And other fe-mn micronudules

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147	5	1	12	13	485.63	485.63	D	0	60	40	Detrital (?) clayey silt Well sorted, rounded grains Major presence of calcite Other components like quartz, black org? or fe-mn micronodules are rare to common
153	5	1	14	15	514.67	514.67	D	0	70	30	Biogenic? Calcareous clayey silt Moderately to well sorted, subrounded to rounded grains Majority of calcite (biogenic? Detrital?) Common presence of quartz and diatoms Rare to common pyrite
163	3	1	13	14	560.64	560.64	D	0	60	40	Detrital (?) calcareous clayey silt Well sorted, subrounded to rounded grains Major presence of calcite (detrital?) Other terrigenous components are rare No biogenic fragments