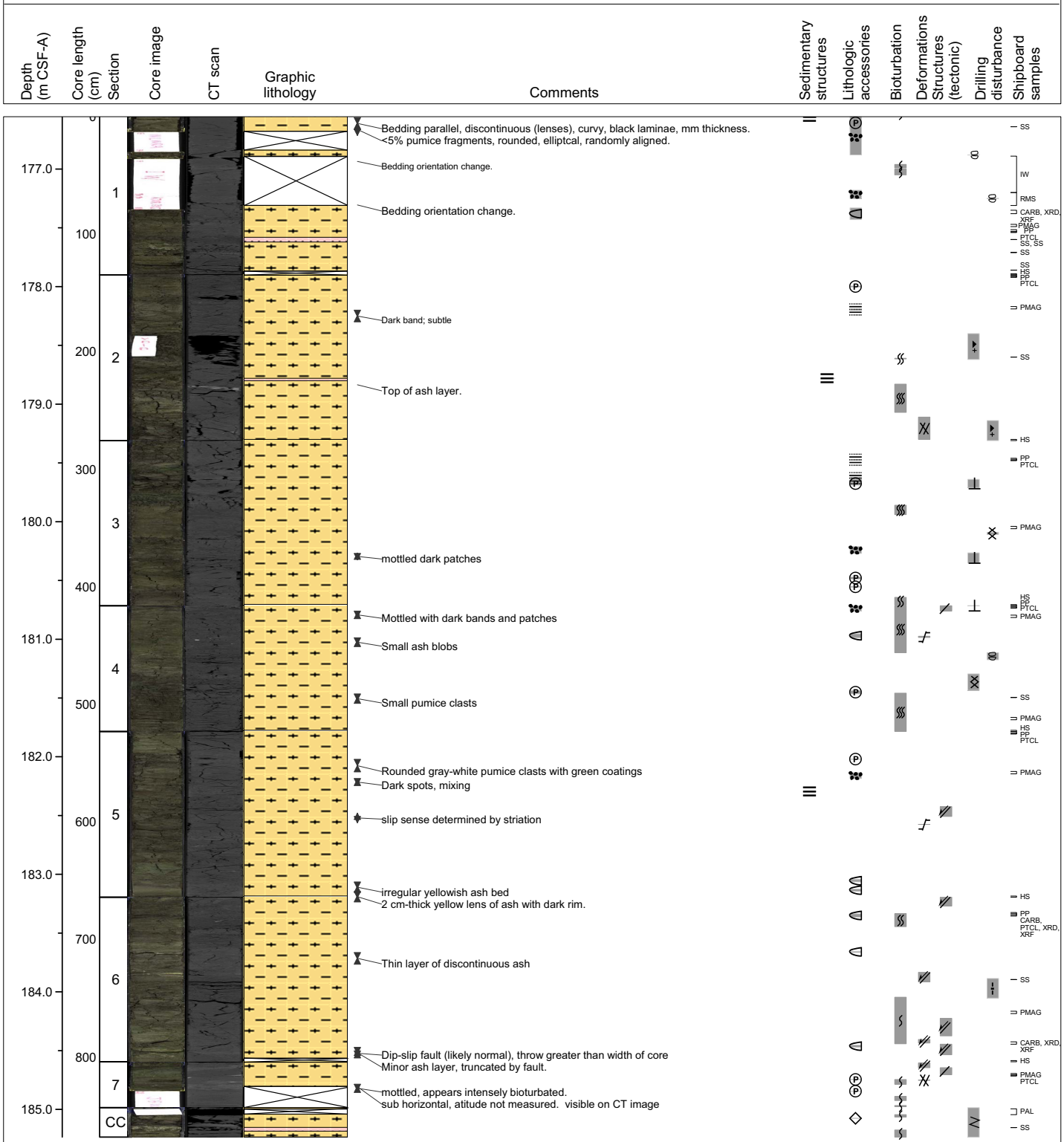
Holes C0019A, C0019B, C0019C, and C0019D NO RECOVERY

Hole C0019E Core 1R, interval 176.5-185.235 m (core depth below seafloor)

Siliceous mud(stone)
Medium greyish olive clay to silt-sized siliciclastic material with minor diatoms, sponge spicules, and ash shards. Contains sporadic (<<5%) subrounded pumice clasts up to 4 mm diameter, sometimes concentrated in cm-thick lenses. There are darker layers, laminae (that may be laterally discontinuous) and patches, ranging from olive brown to dark grey. Contacts between the various colors are rarely planar and may undulate up to 1 cm perpendicular to main bedding.

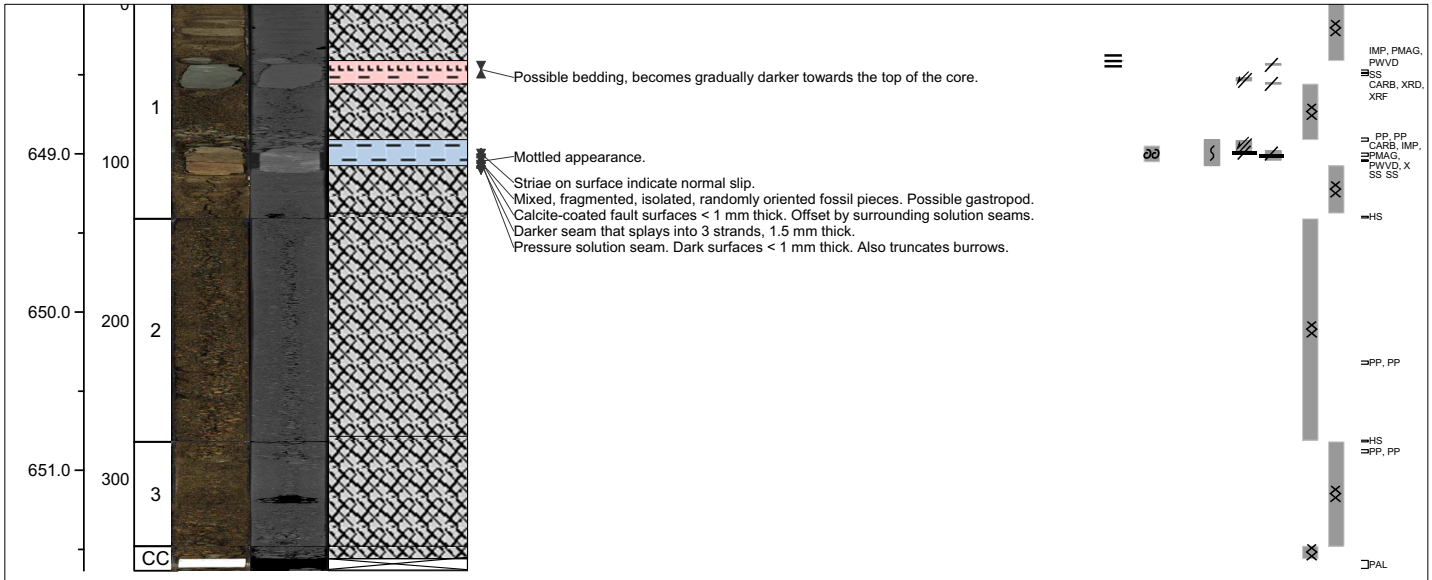
Ash (tuff)
Light grey to light olive grey ash. Contains >60% volcaniclastics from smear slide observations. May form cm-thick planar layers or discontinuous pods with interfingering boundaries with surrounding siliceous mud.



Hole C0019E Core 2R, interval 648-651.635 m (core depth below seafloor)

Mixed drilling breccia
Completeley brecciated and disaggregated. Broken into sub mm to ~1 cm sized, angular to sub-rounded fragments. Larger fragments are sorted into axis of core. Fragments are in 4 compositions:
- dark gray (Munsell color 10G-3/1) silty with black slivers 3 mm long, <<1 mm thick. fragments tends to be sub-angular to sub-rounded
- medium gray (5B-7/1) sub-angular fragments
- brown (2.5Y-4/4) angular fragments
- pale gray (N-8/0), carbonate (verified with HCl), fragments form angular wafers.

All show a range of size distributions, except for the carbonate veins which are mm thickness.
Two lithologic units identified in coherant core sections: Ashy mudstone Medium gray (5B-5/1) ashy mud(stone). Silt and clay grains with an overall speckled grey/black appearance. Mottled with patches of paler color where black grains are missing (from bioturbation). Contains 1-2 mm thick black, silty (organic?), discontinuous laminations.
Red-Brown Silty Terrigenous clay(stone)
Terrigenous component dominated (>70%), clay-rich, greyish-brown mudstone. Fossiliferous, ultra-fine grained (mostly < 60 micron) with patchy calcite cement (HCl). Archive half contains one macrofossil.



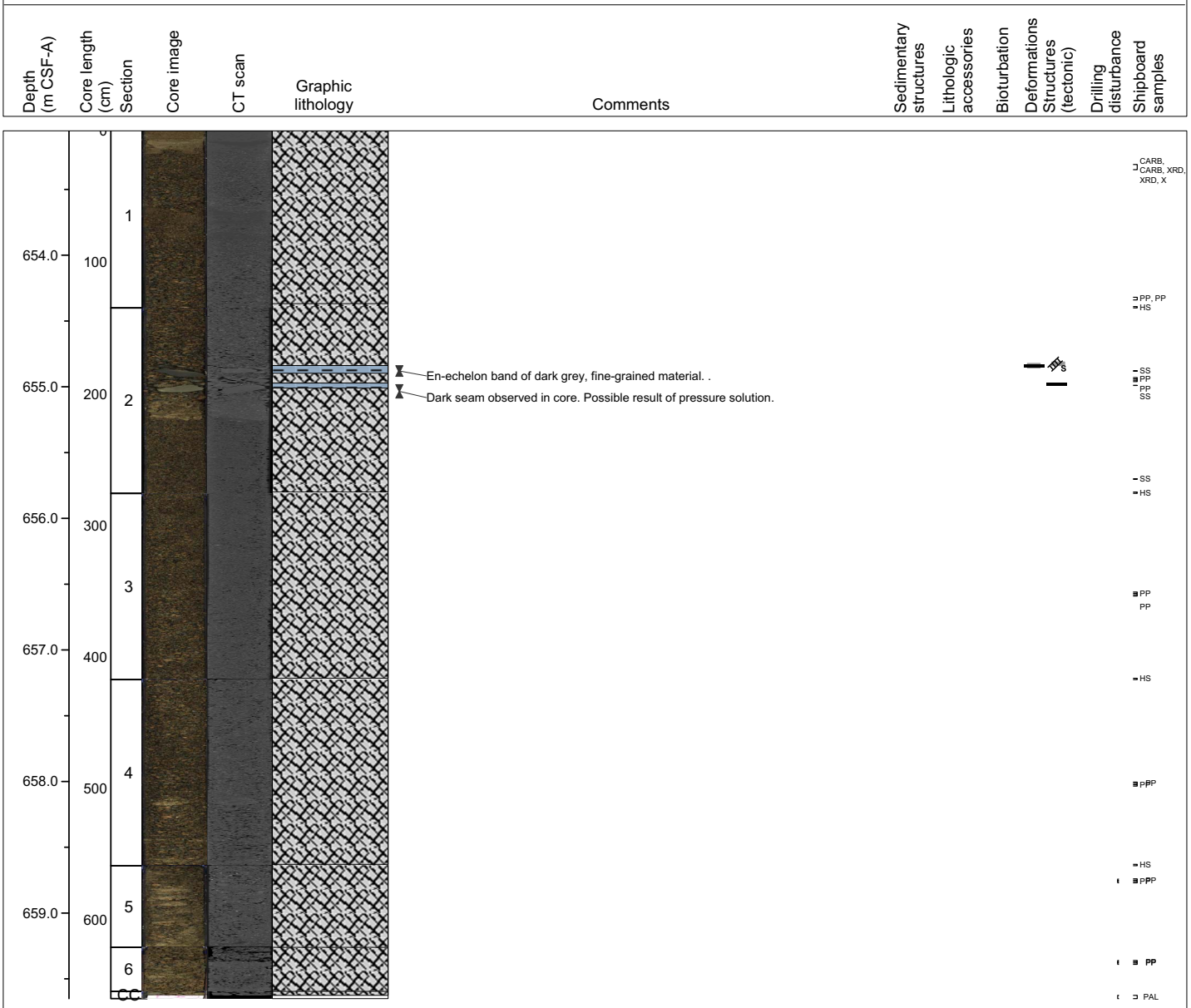
Hole C0019E Core 3R, interval 653-659.65 m (core depth below seafloor)

Majority of core consists of fragmented, drilling induced breccia. Rock fragements in breccia consist of: a medium to dark grey mudstone, a light gray silty mudstone, a red-brown silty clay, and a brown to red-brown silty clay with coarser lithic fragments.

Two intact rock fragments were preserved in section 2.

Lithology 1:
medium grey mud(stone), rich in terrigenous material, ~75% siliclastic grains and ~24% volcanic grains, and trace siliceous microfossils.

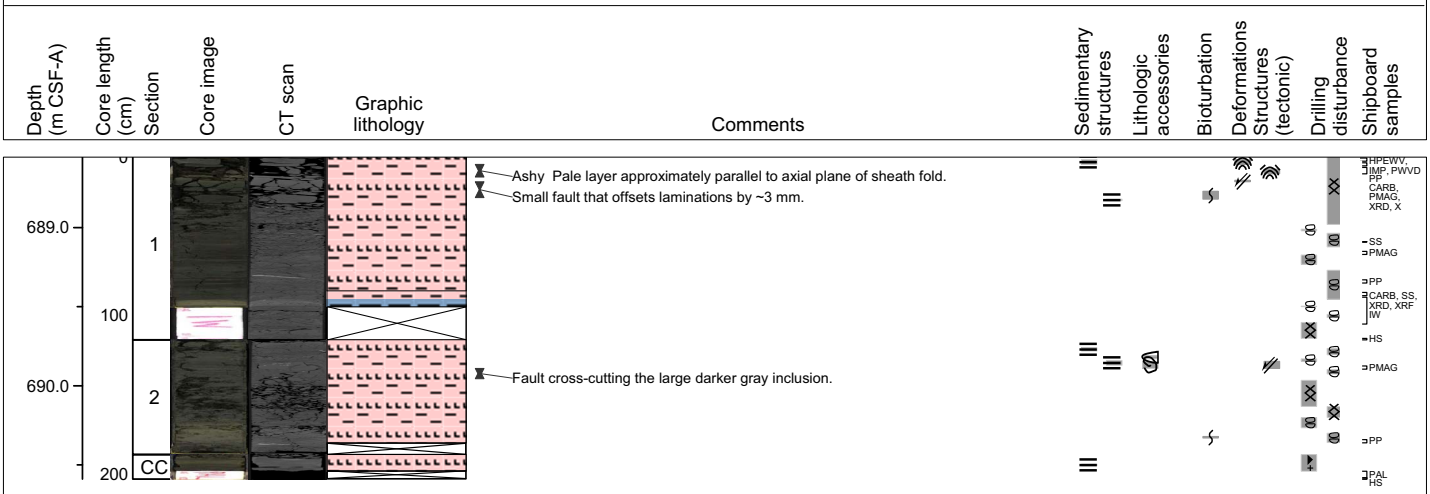
Lithology 2:
grey mud(stone), dominantly terrigenous with high clay content, ~65% siliclastic grains, ~35% volcanic grains, and minor siliceous microfossils.



Hole C0019E Core 4R, interval 688.5-690.59 m (core depth below seafloor)

Black ashy mudstone

Dark gray to black, ultra-fine grained, laminated mudstone with dominant volcaniclastic component. Grain size is predominantly clay-sized, with scattered black silt-sizesd speckles. Bedding is defined by medium gray to black, 1-4 mm thick laminations (occasionally discontinuous). Rare elliptical, black, smudgy patches and sub-mm scale pale gray mottling may be worm burrows. Terrigenous component ~55% (dominated by clay), volcaniclastic ~44% (including pumice and glass fragments) and 1% biogenic fragments. Minor lithology is pale greenish-gray claystone containing >90% clay sized terrigenous particles. Forms few cm thick beds.

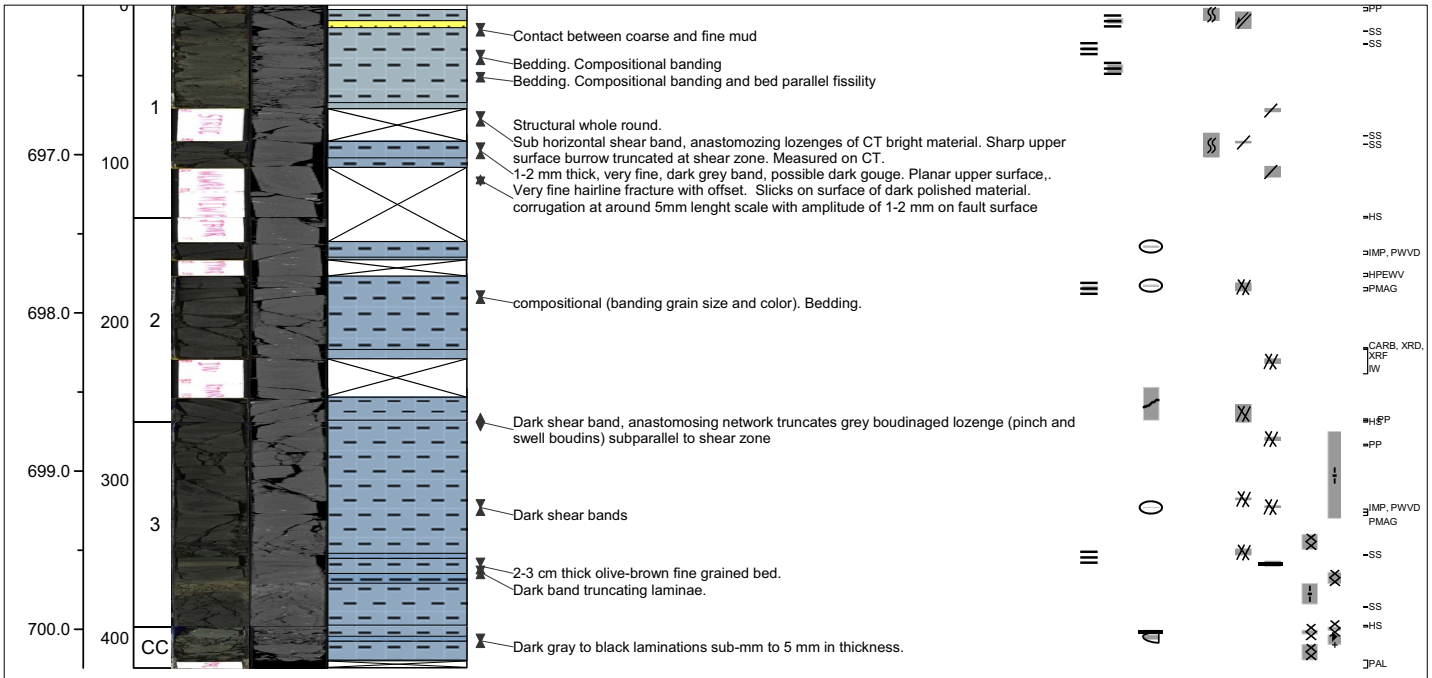


Hole C0019E Core 5R, interval 696-700.245 m (core depth below seafloor)

Major unit:
Inerbedded (cm or greater scale) dark grey mudstone with dark lamiae, ashy mudstone, and silty mudtone. Dark gray mudstone bedding defined by mm scale, wavy and anastomosing, dark black (organic?) compositional banding. Contains ~80% siliclastic grains and ~15% ash. Dark grey mudstone is interbedded with light green-grey, ashy, silty-sandstones with dominant volcaniclastic component (~40%), particularly at the uppermost interval (section 1, 1-55 cm). Minor interbeds of claystone contain 70% siliclastic grains and 29% volcanic grains. Silaceous fossil fragments occur in trace amounts throught section with interbeds containing up to 15% silaceous material.

Unit contains trace pumice in isolated beds, and minor pyrite concretions often found in association with dark lenses.

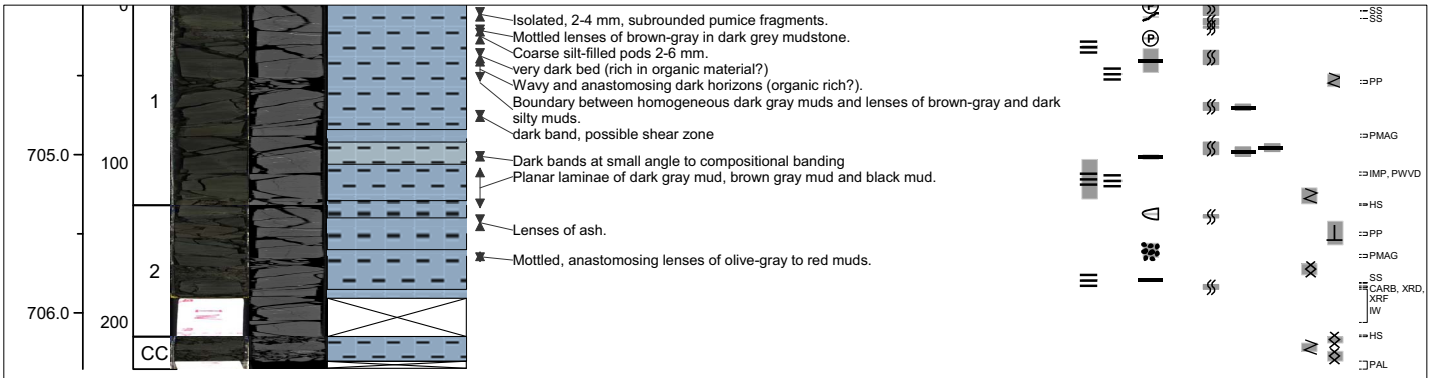
Bedding in all lithologies commonly occur as anastamosing, boudined layers or losenges of variable thickness. Tthin, planar, coherant laminated beds are present, but less common.



Hole C0019E Core 6R, interval 704-706.355 m (core depth below seafloor)

Mudstone

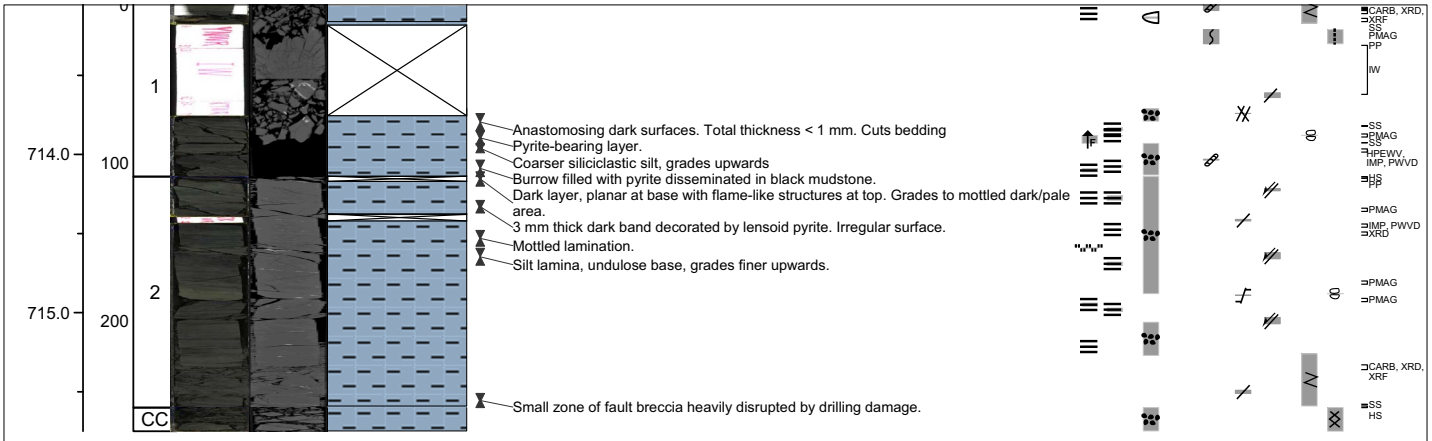
Very dark gray mudstone with black, few mm-scale laminae. Wavy and anastomosing banding defines bedding through most of the section. Small intervals display thin, planar, laminar bedding of interbedded brown-gray and dark horizons. Rare ash layers and horizons containing isolated pumice clasts.



Hole C0019E Core 7R, interval 713-715.75 m (core depth below seafloor)

Major lihology consits of interbedded dark grey mudstone with black laminations, ashy silty mudstone, and olive-grey mudstone,

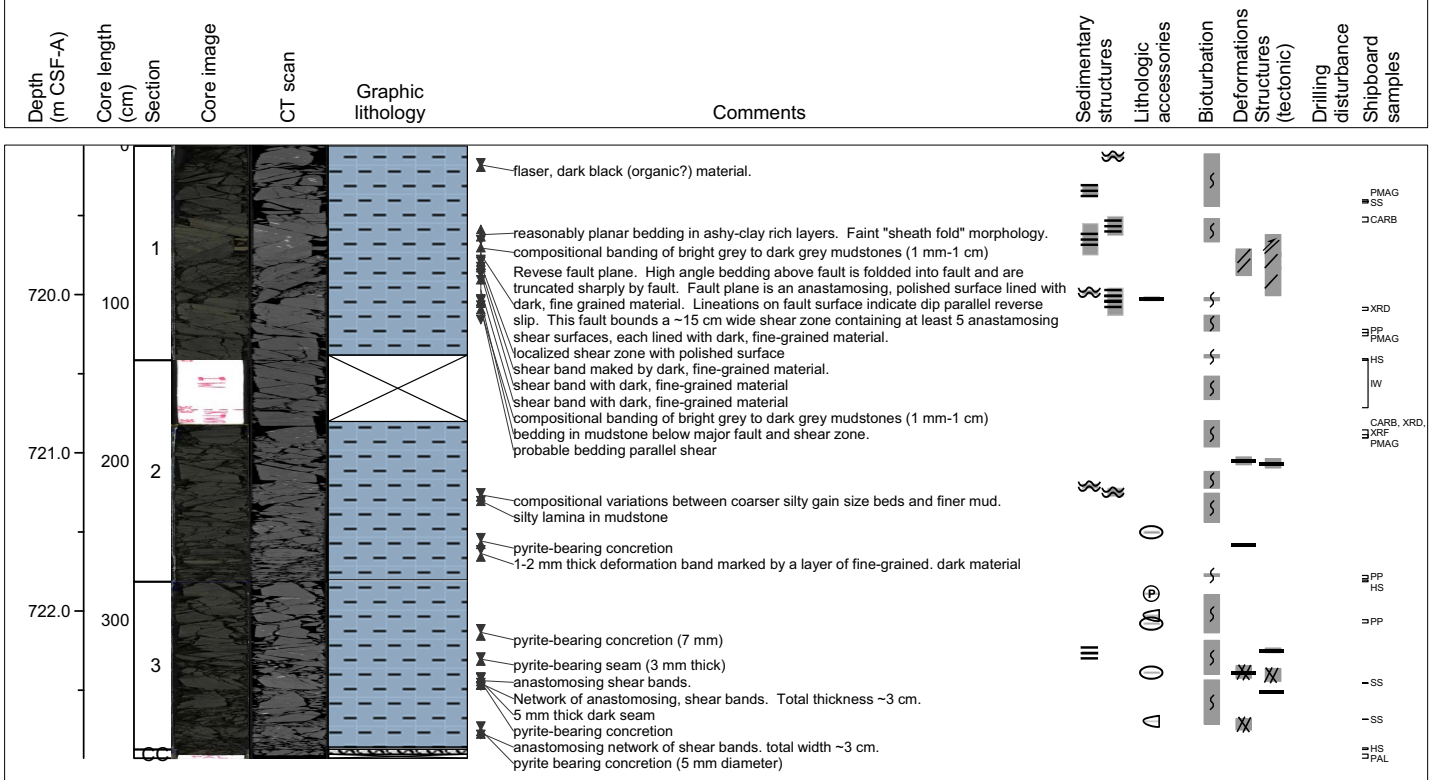
The dominant lihology is a dark grey mudstone consists of ~70% siliclastic grains, 30% volcanic grains, and trace silaceous microfossils. Grey mudstone contains thin layers of dark grey to black (possibly organic rich) material (66% siliclastic grains, 33% volcanic and trace pelagic grains). Bedding is defined by interlayers of dark grey mudstone and is often wavy or flaser, with lateral thickness variations in the bedding plane.
Dark grey mudstone contains interbeds of olive grey-brown mudstone. These horizons tend to be rich in clay relative to surrounding layers.
Interbeds of silty-sand/ sandy-silt are present predominantly within the dark grey dominany lithology. These layers contain ~85% siliclastic grains, 15% volcanic grains and trace silaceous fossils.
Discontinusous bedding and lenses of clay material may be the result of soft-sediment layer parallel shearing.



Hole C0019E Core 8R, interval 719-722.93 m (core depth below seafloor)

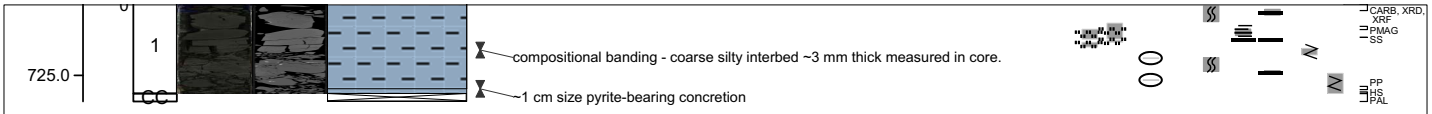
Major lithologies:

Dark grey mudstone interbedded with light green mudstone, dark (organic-rich) layers and silty mudstones.
Dark grey mudstone contains 90% siliclastic grains and 10% volcanic grains. Dark (organic?) layers occur as flaser bedding, wavy laminae, and boudined lenses and losenges. Some contain pyrite concretions. Thin, planar, coherent laminated beds are present, but less common.
Green-grey to light brown clay-rich mudstone is a secondary dominant lithology. Unit contains 90% siliclastic grains and 10% volcanic grains, with 70% of the material in the clay grain size fraction. Dark grey mudstone and grey-green mudstone litholgies are interbeddd at the decimeter scale.
Laminae and >cm thick beds of coarse silty mudstone and siltstone containing conspicious quartz and feldspar are present throught core. Sporadic concretions (few mm-1 cm diameter) and dark patches (organic materials, few mm) are present. All units contain trace to 15% siliceous fossils and fossil fragments.



Hole C0019E Core 9R, interval 724.5-725.165 m (core depth below seafloor)

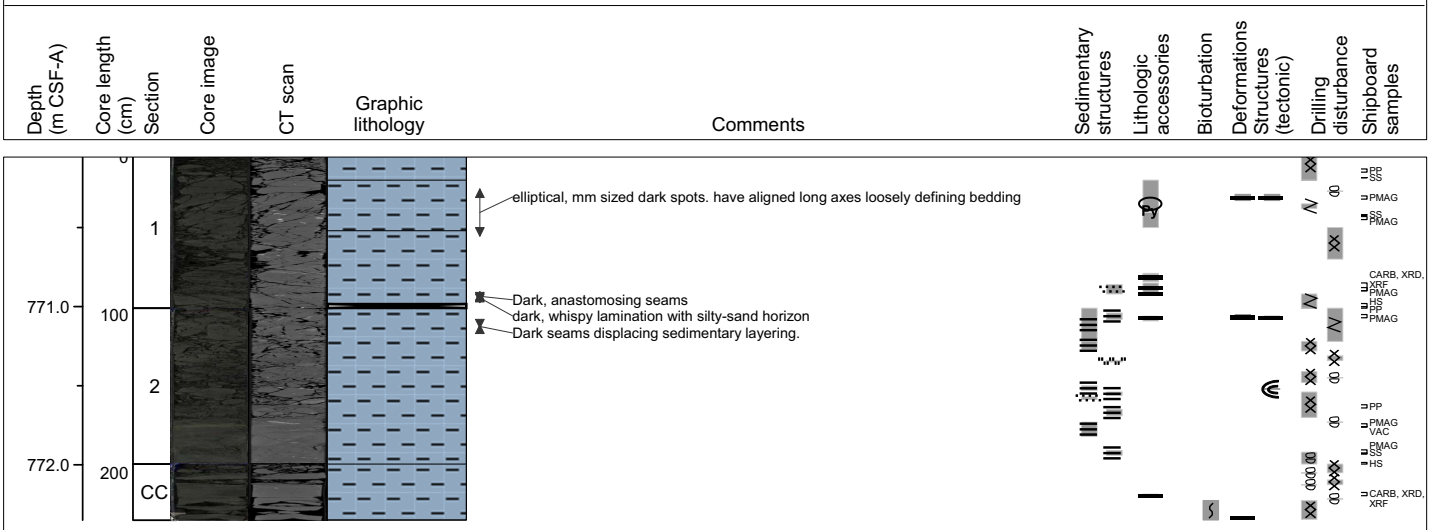
Major lithology:
Dark grey-green mudstone (70% siliclastic and 25% volcanic) containing dark (organic?) lenses and layers. Upper portion of unit (17-27 cm) is dominated by a coarser grain-sized silty mudstone with siltstone laminae. Bioturbation present in clay rich intervals. Contains few mm-thick dark seams and some pyrite concretions (~1 cm diameter). Core constains the grey mudstone and ashy-silty mudstone lithologies of cores 7 and 8.



Hole C0019E Core 10R, interval 770-772.35 m (core depth below seafloor)

Mudstone
Same as previous. Contains sparse laminae of silty and sandy horizons with associated black bands.

Interval 10R-1, 0.2-0.5
Dark gray to gray, mudstone. Differentiated by dark, elliptical spots with long axes aligned to define a planar fabric. May be associated with pyritized burrows.



Hole C0019E Core 11R, interval 780.5-780.635 m (core depth below seafloor)

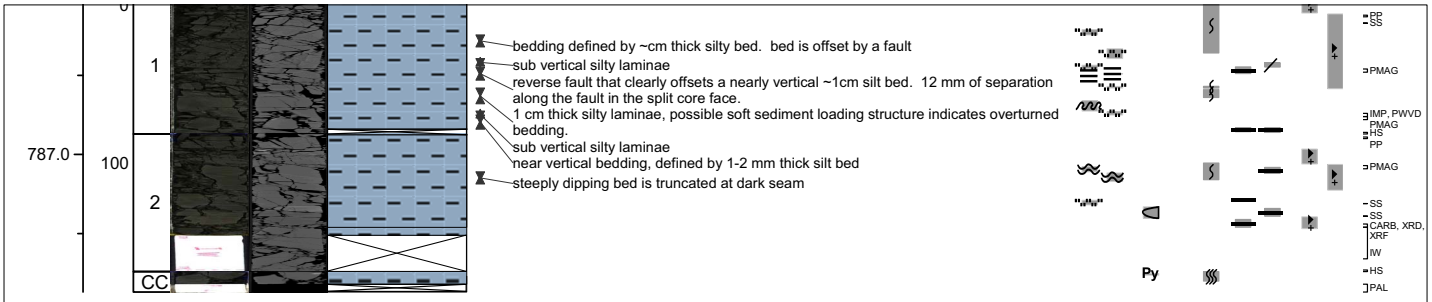
Blue gray siliceous mudstone
Pieces 1 (1-3cm) and 3 (7-10 cm)
Silty mudstone (70% siliclastic) with abundant biogenic fragments including diatoms and sponge spicules (20-33%). Grain size is silty or smaller (70% clay). Faint laminations are defined by <<1 mm thin whispy laminations and bright X-CT numbers compared to predominant values. Piece #1 contains brecciated, sub-angular fragments of olive-brown-grey mudstone in a dark grey matrix.

Gray Siliceous mudstone
Pieces 2 (3-6 cm) and 4 (10-13 cm).
Homogeneous, gray siliceous mudstone wiht >70% siliclastic grains, ~15% volcanic grains, and <10% silaceous. Represented by a few biscuits in C11R. Contains few indications of bedding and no observed laminations. Mottled bedding. Numerous worm burrows are <0.7 mm wide, dispersed and follow sinuous random tracks. No observed deformation in X-CT.

Hole C0019E Core 12R, interval 786-787.87 m (core depth below seafloor)

Dominant lithology:

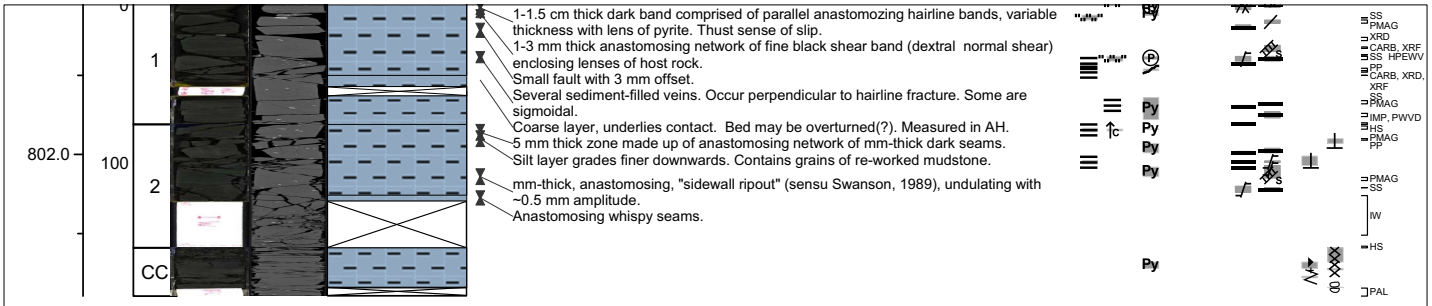
dark grey green homogenous mudstone, with dominant (>90%) siliclastic grains, minor silaceous fossil fragments (>10%) and trace ash (1%). Mudstone is commonly biotrubed and mottled. Mustone is frequently interbedded with mm-cm scale silty laminae, with dominant (98%) siliclastic grains with abundant quartz and feldspar fragments, and trace ash and silcaceous grains.



Hole C0019E Core 13R, interval 801-802.895 m (core depth below seafloor)

Dominant lithology:

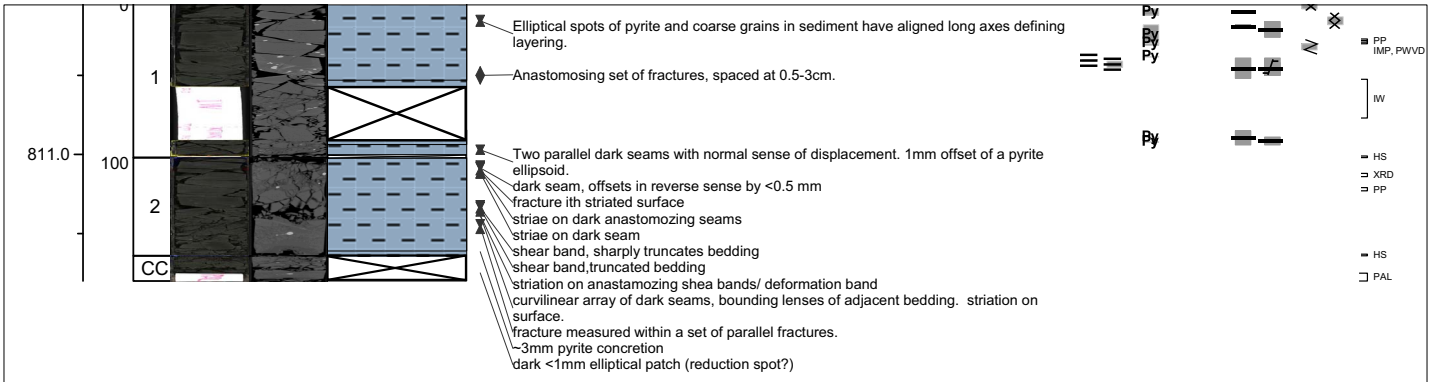
dark grey green homogenous mudstone, with dominant (>90%) siliclastic grains, minor silaceous fossil fragments (>10%) and trace ash (1%). Mudstone is commonly biotrubed and mottled. Mustone is frequently interbedded with mm-cm scale silty laminae, with dominant (98%) siliclastic grains with abundant quartz and feldspar fragments, and trace ash and silcaceous grains.



Hole C0019E Core 14R, interval 810-811.8 m (core depth below seafloor)

Dominant lithology:

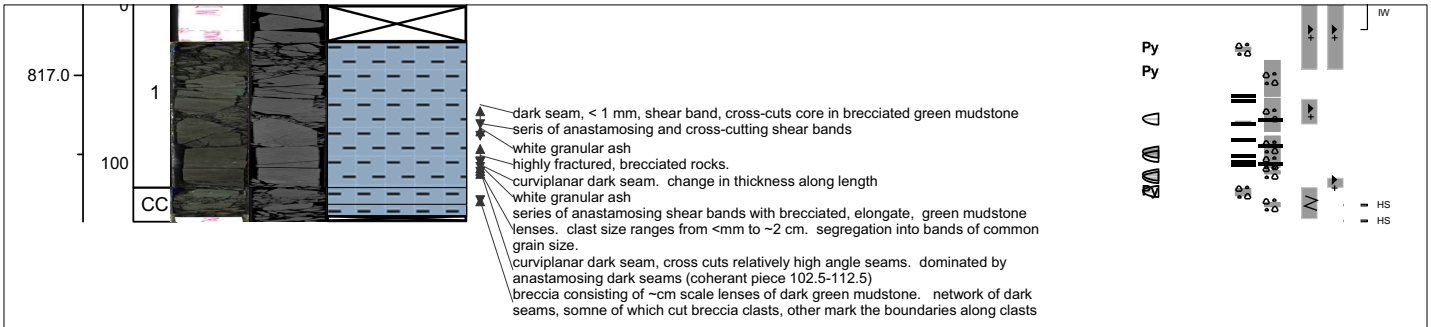
dark grey green homogenous mudstone, with dominant (>90%) siliclastic grains, minor silaceous fossil fragments (>10%) and trace ash (1%). Mudstone is commonly biotrubed and mottled. Mustone is frequently interbedded with mm-cm scale silty laminae, with dominant (98%) siliclastic grains with abundant quartz and feldspar fragments, and trace ash and silcaceous grains.



Hole C0019E Core 15R, interval 816.5-817.925 m (core depth below seafloor)

Dominant lithology:

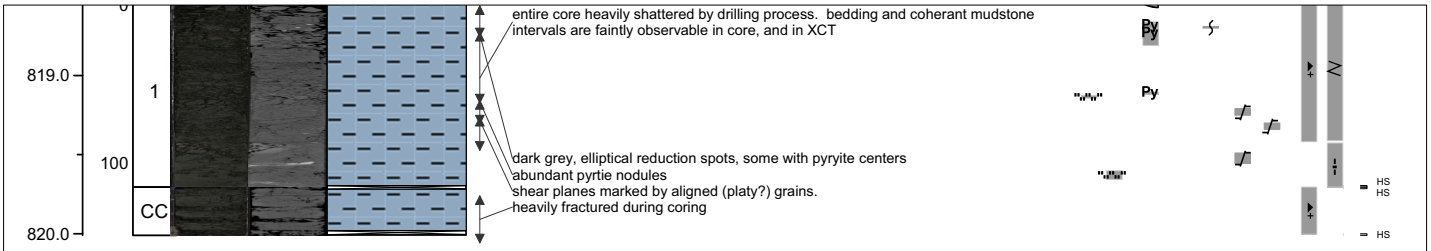
dark grey green homogenous mudstone, with dominant (>90%) siliclastic grains, minor silaceous fossil fragments (>10%) and trace ash (1%). Mudstone is commonly biotrubed and mottled. Mustone is frequently interbedded with mm-cm scale silty laminae, with dominant (98%) siliclastic grains with abundant quartz and feldspar fragments, and trace ash and silcaceous grains.



Hole C0019E Core 16R, interval 818.5-820.01 m (core depth below seafloor)

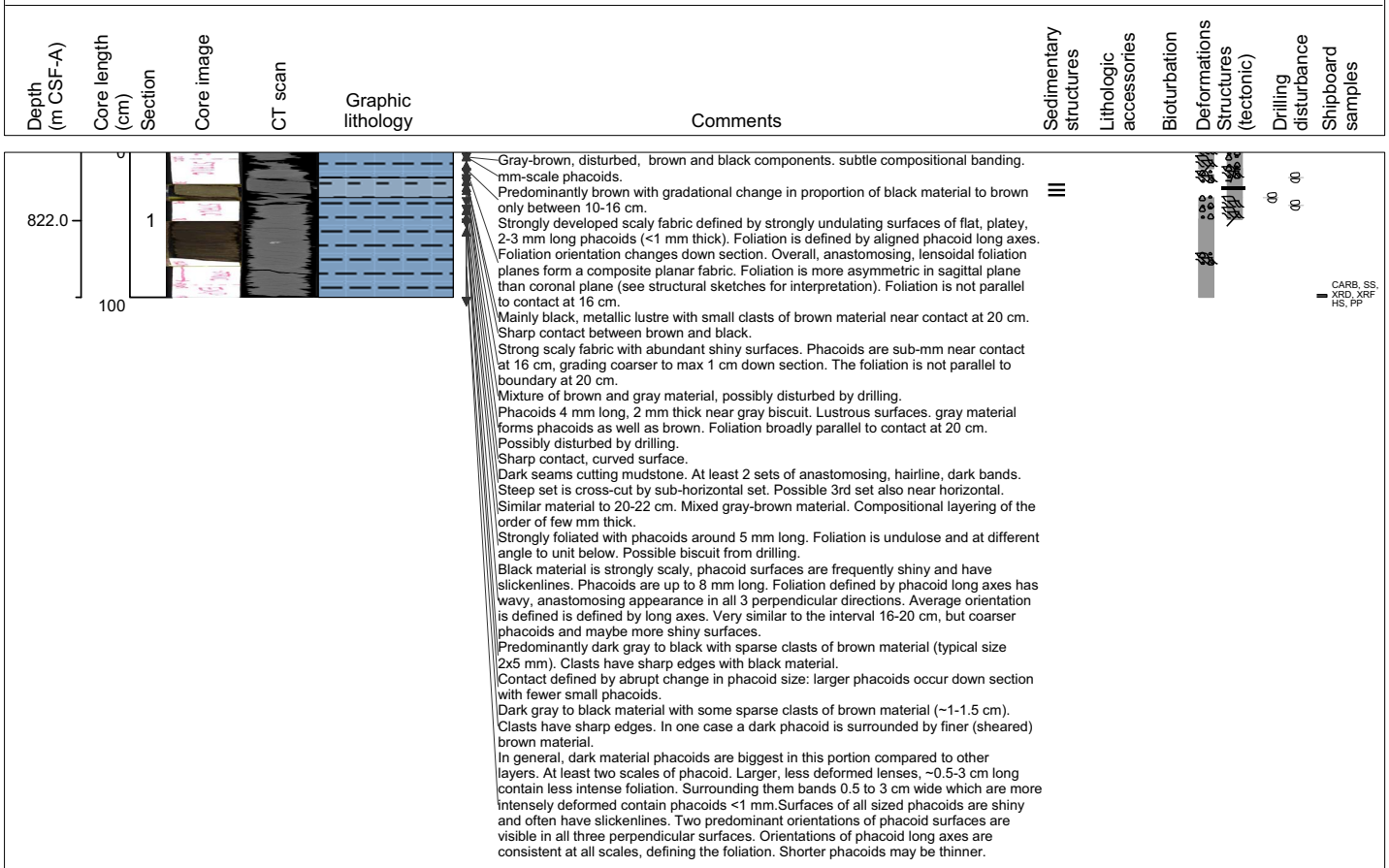
Dominant lithology:

dark grey green homogenous mudstone, with dominant (>90%) siliclastic grains, minor silaceous fossil fragments (>10%) and trace ash (1%). Mudstone is commonly biotrubed and mottled. Mustone is frequently interbedded with mm-cm scale silty laminae, with dominant (98%) siliclastic grains with abundant quartz and feldspar fragments, and trace ash and silcaceous grains.



Hole C0019E Core 17R, interval 821.5-822.5 m (core depth below seafloor)

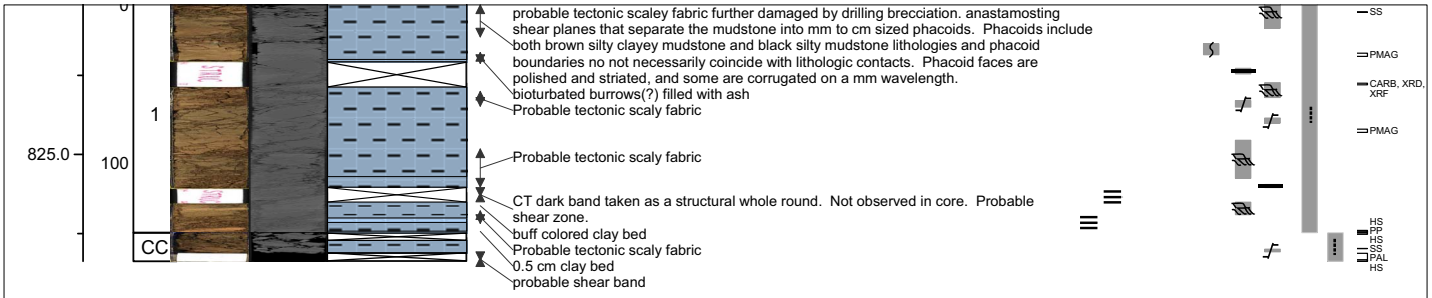
Three different materials: a brown (clayey) lithology, a dark gray to black lithology and a greenish gray, homogeneous mudstone. Mudstone is only present in one 13.5 cm long biscuit. The brown material includes patches of the black material, and vice-versa. Within each of these materials, patches have sharp edges. One rim of brown material was observed surrounding a black phacoid. The boundaries between predominantly brown and predominantly black intervals are sharp. A sharp contact also separates more and less strongly deformed rock within the black material-dominated interval.



Hole C0019E Core 18R, interval 824-825.675 m (core depth below seafloor)

Dominant lithology:

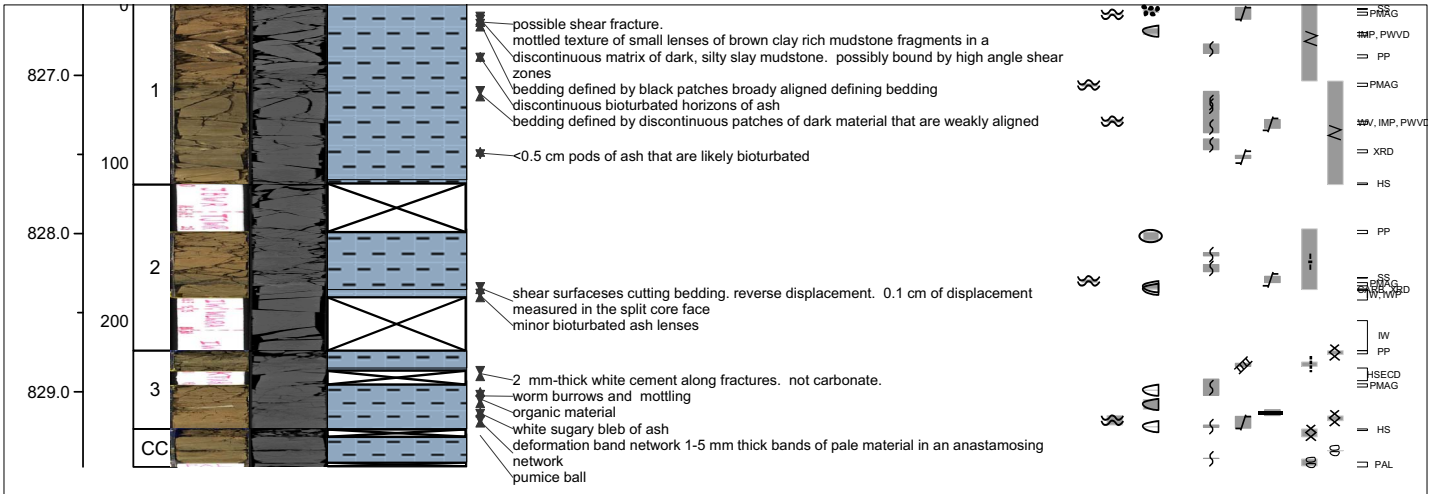
Brown silty clayey mudstone.
Silty mudstone occurs as elongate lenses in a discontinuous matrix of darker brown, silty mudstone with abundant black silt grains (manganese - see smear slide at 59 cm in section 2).
Dark silty horizons are commonly concentrated in biotrubated discontinuous blebs. Decimeter scale graditional sequences from more clay-rich mustone at top of beds to siltier Mn rich beds at base. Bases of dark silty beds often have abrupt transitions to clay-rich mudstone below.
Commonly contains discontinuous pods and lenses of white granular ash that may be concentrated in bioturbated horizons. (see smear slide in section 1 at 33 cm)
Bedding is not well defined but is loosely identifiable by aligned lenses of various mudstone lithologies, likely the result of both bioturbation and moderate shear.
Unit is not intensely deformed but contains local zones of shear.



Hole C0019E Core 19R, interval 826.5-829.475 m (core depth below seafloor)

Dominant lithology:
Brown silty clayey mudstone - same as in core 18.

Silty mudstone occurs as elongate lenses in a discontinuous matrix of darker brown, silty mudstone with abundant black silt grains (manganese - see smear slide at 59 cm in section 2).
Dark silty horizons are commonly concentrated in biotrubated discontinuous blebs. Decimeter scale graditional sequences from more clay-rich mustone at top of beds to siltier Mn rich beds at base. Bases of dark silty beds often have abrupt transitions to clay-rich mudstone below.
Commonly contains discontinuous pods and lenses of white granular ash that may be concentrated in bioturbated horizons. (see smear slide in section 1 at 33 cm)
Bedding is not well defined but is loosely identifiable by aligned lenses of various mudstone lithologies, likely the result of both bioturbation and moderate shear.
Unit is not intensely deformed but contains local zones of shear.

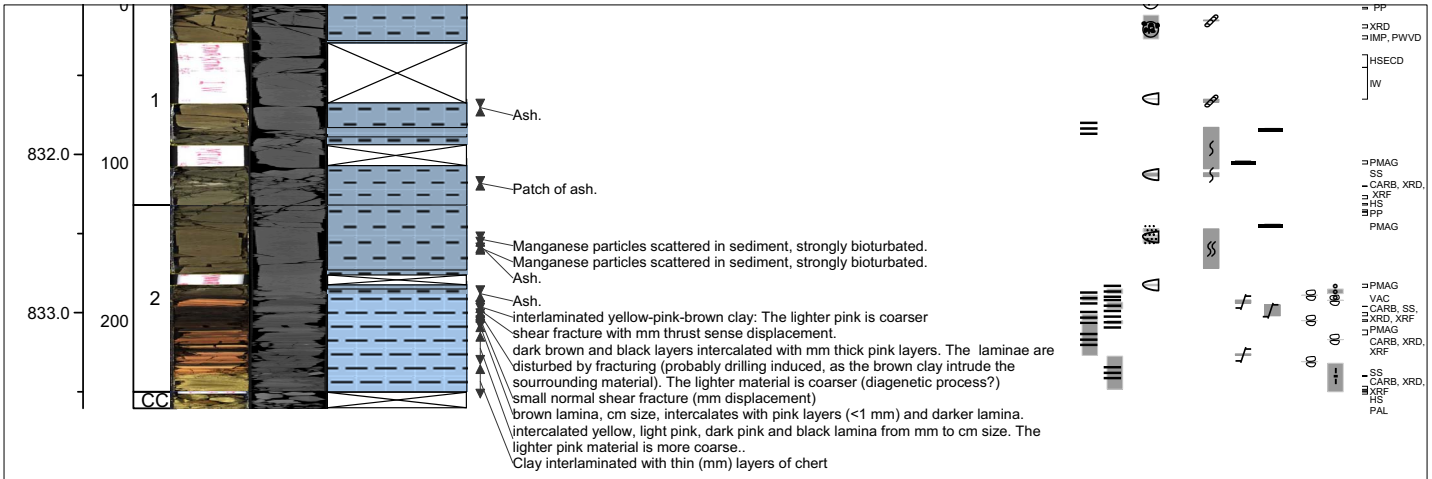


Hole C0019E Core 20R, interval 831-833.605 m (core depth below seafloor)

Dominant lithologies:

Brown silty clayey mudstone, as observed in cores 18 and 19, is present the upper 190 cm of core 20. Bedding is loosely defined by elongate, discontinuous lenses of brown silty mudstone and dark (Mn rich) silty mudstone. Occasional pods of white, grainy ash, preferrentially included in burrows and bioturbated intervals.
Bottom 65 cm consists of laminar, yellow brown and dark brown clay, with occasional pink, red-brown and white laminae. Unit consists of >80% siliclastic grains, with <10% volcanic grains and trace to <10% siliceous microfossils. More than 75% of the material falls in the clay grain size fraction. Claystone contains minor amounts of pyrite or manganese, and possible crystobalite.

The base of the claystone recovered contains fragments of yellow-brown chert, as observed in core 21.



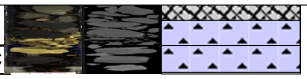
Hole C0019E Core 21R, interval 836.5-836.99 m (core depth below seafloor)

Entire core consists of rock fragments - no intact core recovered.

Upper 15 cm consists of fragments of mudstone from cores 18-20 and possibly from cores above core 17. These are interpreted to be fragments that fell into the base of the hole and are not interpreted to be in place.

Remainder of core consists of fragments of yellow-brown and chocolate brown laminar chert.

Yellow-brown chert: <mm to mm scale laminae of light yellow-brown (Hue 5y 7/2) and dark yellow-brown (Hue 5Y 6/3) chert and occasional cm bands of translucent (Hue 10Yr 5/6) chert. These fragemnts are often coated in clay of the same color, as is found at the base of core 20 section 2

Depth (m CSF-A)	Core length (cm)	Section	Core image	CT scan	Graphic lithology	Comments	Sedimentary structures	Lithologic accessories	Bioturbation	Deformations Structures (tectonic)	Drilling disturbance	Shipboard samples
0		1				entire core consists of fragments that are not in place.					N	HPEWV, IMP, PWVD XRD PP PAL
		CC										

Smear slides

Hole	Core	Core Type	Section	A/W	Interval (cm)	% Siliciclastic Grains	% Volcaniclastic Grains	% Siliceous Microfossils	% Others	% Sand (> 63 µm)	% Silt (4 - 63 µm)	% Clay (< 4 µm)	Sediment classification	Comments
C0019E	1	R	1	A	14	45	5	50	0				Siliceous Mudstone	
C0019E	1	R	1	A	110	0	97	3	0				Ash	Sampled from ash layer (107 - 112 cm)
C0019E	1	R	1	A	121	20	10	70	0				Siliceous Ooze	Predominantly fragments of diatoms, radiolarians, and sponge spiculs
C0019E	1	R	1	A	136	45	10	45	0				Siliceous Mudstone	
C0019E	1	R	2	A	70	45	33	22	0				Ashy Mudstone	Background lithology in section 4
C0019E	1	R	4	A	78	16	29	55	0				Siliceous Mudstone	Background lithology for most of core 1 (exp. Is section 4)
C0019E	1	R	6	A	70	40	20	40	0				Siliceous Mudstone	
C0019E	1	R	CC	A	17	20	80	0	0				Ash	Sampled from ~3-cm thick ash bed (16.8 - 20 cm)
C0019E	2	R	1	A	49	50	40	10	0				Ashy Mudstone	Gray chunk in drilling breccia, lots of altered feldspars
C0019E	2	R	1	A	104	70	28	2	0				Mudstone	Brown chunk in drilling breccia
C0019E	2	R	1	A	104.5	70	28	2	0				Mudstone	Recheck of slide @104, which had a very light smear, lots of silt
C0019E	3	R	1	A	130.1	63	2	35	0				Mudstone	Breccia fragment
C0019E	3	R	1	A	130.2	50	30	20	0				Mudstone	Breccia fragment, ashy
C0019E	3	R	1	A	130.3	50	35	15	0				Mudstone	Breccia fragment, ashy
C0019E	3	R	1	A	130.4	60	20	20	0				Mudstone	Breccia fragment
C0019E	3	R	2	A	48	75	24	1	0		30	70	Mudstone	Terrigenous rich fragment
C0019E	3	R	2	A	59	65	34	1	0		40	60	Mudstone	Ash content higher than last two intervals, but not enough to be classified ashy
C0019E	4	R	1	A	1	90	2	8	0			> 75	Claystone	Rare volcanic detritus, fragments of siliceous fossils
C0019E	4	R	1	A	59	55	44	1	0				Ashy Mudstone	Background lithology of core
C0019E	4	R	1	A	91	90	5	5	0			> 75	Claystone	Distinct gray clay layer (at base of core) not background
C0019E	5	R	1	A	22	63	37	Tr	0				Ashy, Silty Sandstone	Significantly more sand/silt than clay
C0019E	5	R	1	A	30	45	55	Tr	0		>25%		Ashy Mudstone	Lots of quartzofeldspathic silt
C0019E	5	R	1	A	88	70	29	1	0				Claystone	
C0019E	6	R	1	A	9	94	5	1	0		50	50	Mudstone	Background lithology of core
C0019E	6	R	1	A	13.9	80	15	5	0		35	65	Mudstone	Taken from black inclusion (mottle)
C0019E	6	R	2	A	49	82	15	3	0		65	35	Mudstone	Sampled from the siltier clay layer, pervasive throughout section 2
C0019E	7	R	1	A	8	60	39	Tr	0		33	66	Mudstone	Background gray mudstone, minor quartzofeldspathic silt, dominant lithology of core 7
C0019E	7	R	1	A	82	66	33	1	0				Mudstone	Thin darker layer of mudstone (82 - 84 cm)
C0019E	7	R	1	A	92.5	85	15	Tr	0				Sandy-silt/Silty Sand	Sampled from thin layer that grades upward into gray mudstone. Silt-dominant grain size.
C0019E	7	R	2	A	144	70	30	Tr	0		30	70	Mudstone	Sampled from background gray mudstone
C0019E	8	R	1	A	3	90	10	Tr	0		30	70	Mudstone	Light Brown chunk at top of core
C0019E	8	R	1	A	41	95	5	Tr	0		30	70	Mudstone	Background lithology of core 8
C0019E	8	R	3	A	64	80	15	5	0	3	57	40	Mudstone	Silty zone in core, significant quartzo-feldspathic silt component classifies as a mudstone
C0019E	8	R	3	A	87	85	0	15	0		30	70	Mudstone	A significant component of broken siliceous microfossil parts.
C0019E	9	R	1	A	26	70	25	5	0	10	50	40	Mudstone	A silty interval in gray mudstone section. If properly sampled at the scale of lamina it might be called a siltstone
C0019E	10	R	1	A	18.5	98	Tr	Tr	0	5	55	40	Mudstone	Sampled from gray mudstone that appears to be dominant lithology, visibly finer-grained than bottom of core
C0019E	10	R	1	A	42	97	Tr	2	0		40	60	Pyrite Nodule	Sampled from pyrite nodule encased in thin dark layer. Predominantly pyrite framboids and sub-rounded cubes (98% pyrite)
C0019E	10	R	2	A	92	90	2	8	0	10	60	30	Mudstone	Sampled from end of core in gray mudstone, slightly coarser than top of core
C0019E	11	R	CC	A	1.5	70	10	20	0				Mudstone	Only fragments in the CC were recovered for core 11. Highest microfossil content since core 1.
C0019E	11	R	CC	A	4.5	77	15	8	0	0	30	70	Mudstone	
C0019E	11	R	CC	A	8	57	10	33	0	0	30	70	Mudstone	
C0019E	12	R	1	A	17	95	1	4	0	3	37	60	Mudstone	Background lithology of core 9
C0019E	12	R	2	A	44	98	1	1	0	3	77	20	siltstone	2 - 3-cm thick sand layer
C0019E	12	R	2	A	52	90	tr	10	0		40	60	Mudstone	Background sample of gray mudstone near base of recovery.
C0019E	13	R	1	A	3.2	60	30	10	0	3	55	42	Mudstone	Dark gray ashy matrix material above the shear band at 6.5 - 8 cm
C0019E	13	R	1	A	13.5	75	15	10	0	10	55	35	Mudstone	Coarser sediment layer bounded by muddy seds on bottom
C0019E	13	R	1	A	37	75	15	19	0	2	58	40	Mudstone	Sampled from dark gray mudstone that seems to be dominant lithology in core
C0019E	13	R	1	A	50	65	25	10	0	5	65	30	Mudstone	Sampled from coarser sed layer in section 1 just above whole round.
C0019E	13	R	2	A	40	88	12	10	0	1	64	35	Mudstone	Sampled from end of core in section 2
C0019E	14	R	1	A	10	94	2	4	0	3	33	64	Mudstone	Background lithology of core 14
C0019E	14	R	2	A	27.5	85	2	3	0	2	75	23	siltstone	Siltstone bed, significant pyrite (10%) not used in classification
C0019E	14	R	2	A	50	95	1	4	0	0	33	67	Mudstone	Background gray mudstone
C0019E	15	R	1	A	46	69	25	6	0	3	57	40	Mudstone	Background gray mudstone of core 15
C0019E	15	R	1	A	113.5	72	5	3	0	0	40	60	Mudstone	Black blobs in sediment near bottom of core
C0019E	16	R	1	A	25	92	2	6	0	3	50	47	Mudstone	Background lithology of core 16
C0019E	16	R	CC	A	9	86	6	8	0	3	55	42	Mudstone	Background gray mudstone
C0019E	17	R	1	WR	3	90	10	Tr	0	0	24	76	Claystone	Brown Clay. Sampled from leftover GC sample cuttings. Silt mostly very fine (≤ 10 µm)
C0019E	17	R	1	W	73.5	10	5	0	85	0	40	60	Black nodule	Crushed up black (manganese) nodule. Some volcaniclastic and siliclastic grains that are mostly clay-sized, but some silt
C0019E	17	R	1	W	78	99	Tr	0	0	0	3	97	Claystone	Darker brown clay inclusion within lighter brown clay interval. Very soft.
C0019E	17	R	1	W	79	95	5	0	0	0	10	90	Claystone	Red Clay from extremely soft layer, lots of iron oxides
C0019E	17	R	1	WR	113.0	99	1	0	0	0	10	90	Claystone	Darker "black: clay from fault core. Considered part of altered fault zone.
C0019E	17	R	1	WR	114.0	98	0	0	4	0	3	97	Claystone	Darker "black clay" Authigenic minerals in background (clinotilolite?). Opaques (Mn or Fe?)
C0019E	17	R	1	WR	89	88	1	1	10	0	1	99	Claystone	Dark brown microcrystalline clay w/ Fe/Mn oxides/hydroxides, opal/chalcedony cement forms colloidal fibres and rims, 1% silty qtz/felds
C0019E	17	R	1	A	38.5	90	3	5	2	0	55	45	Mudstone	Gray mudstone inclusion. Similar to mudstone in unit 3, core 15
C0019E	18	R	1	A	10	91	3	6	0	0	22	78	Claystone	Background lithology
C0019E	18	R	CC	A	10	78	10	2	0	0	20	80	Claystone	background lithology
C0019E	19	R	1	A	8	94	4	2	0	2	30	60	Mudstone	Background lithology
C0019E	19	R	1	A	12	92	5	3	0	3	32	65	Mudstone	Yellow-Brown clay region with NO burrows evident; 3% Sand, 32% Silt, 65% Clay
C0019E	19	R	1	A	33.5	8	92	0	0	1	55	44	Tuff	Yellowish-gray tuff bleb
C0019E	19	R	2	A	59	72	3	10	15	10	40	50	Mudstone	Gray-black blebs in background lithology. Includes ~15% opaque grains interpreted as manganese, but could be pyrite.

Hole	Core	Core Type	Section	A/W	Interval (cm)	% Siliciclastic Grains	% Volcaniclastic Grains	% Siliceous Microfossils	% Others	% Sand (> 63 µm)	% Silt (4 - 63 µm)	% Clay (< 4 µm)	Sediment classification	Comments
C0019E	19	R	3	A	48	85	10	5	0	3	45	52	Mudtsone	Yellowish-gray clay later at bottom of core, no burrows, less reddish than top of core
C0019E	20	R	1	A	25	97	1	2	0	Tr	35	65	Mudstone	Greenish gray sediment at top of core, clay-rich muds
C0019E	20	R	1	A	120	75	10	15	0	0	30	70	Claystone	Noted as mudstone on VCD description sheet
C0019E	20	R	2	A	57.5	75	Tr	0	15	Tr	30	70	Claystone	Sampled from the pinkish brown layer clay layer, ~1.5 cm wide, some of the silt may be authigenic
C0019E	20	R	2	A	58.5	80	10	0	10	Tr	15	85	Claystone	Rich brown layer bounding the pinkish brown layer sampled above. Not gritty at all when tasted
C0019E	20	R	2	A	68	90	Tr	10	0	8	20	72	Claystone	Sampled from dark layer (61-74 cm)
C0019E	20	R	2	A	108	90	0	0	10	0	10	90	Claystone	Green clay layer, low relief/birefringence minerals, poss. Zeolites

* Light colors denote major stratigraphic units
* Darker colors within lighter domain indicate sub-lithologies