doi : 10.17596/0003791

2009-11-17 22:47

Scientific Report for Cruise CK09-03 Expedition 904

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November 18, 2009

1 Introduction

Paleoclimate changes at the Pacific Ocean is important for reconstructing global climate change, since currents in Pacific Ocean play crucial roles for heat transfer from equatorial to polar regions. The northwestern Pacific has some active plate margins, making high sedimentation rates in general. Drilling site off Boso, water depth of 2029 m, locates near from the Sagami Trough axis. Both terrestrial inputs along the Trough and biogenic particles from the ocean surface were expected to be sedimented on the seafloor with high sedimentation rate. The settings enable high-resolution paleoenvironmental reconstruction using microfossils in the sediments.

Off Boso is also a key area to reconstruct paleoceanographic changes because the area is a transition zone of two major currents: the Kuroshio current (warm, western boundary current of the large subtropical gyre in the North Pacific) and the Oyashio current (cold, nutrient enriched northern component water). Climatic changes during Cenozoic should affect to circulation patterns of Kuroshio/Oyashio, and vice versa, so cores from this area should provide detailed history of global climate changes and responses of land/ocean at western Pacific.

In this drilling cruise, we tried to establish standard age model for western Pacific Cenozoic strata by analyzing core samples off Boso Peninsula. Paleoceanographic analyses will be done with the cores for understanding climatic changes of the Japanese Islands, in particular to central Japan. We also carried out an experimental study to assess the possible contamination during drilling and recovery of cores for microbiological study. The results provide standard protocol for collecting intact, contamination-free microbiological samples during future IODP expeditions.

2 Site and holes

Site C9010 had been planned at the coordinate of 34 deg. 33.45 min. North, 139 deg. 53.40 min. East. The training region is south off Boso Peninsula and east from Ooshima and Niijima Islands. The site is at a gentle slope between Niijima and Miyake Canyons, which merge to large Bose and Awa Canyons, respectively (Fig. 2-1). Firstly, Holes C9010A and C9010B were drilled at the position of the site and the next holes were offset every 30 m toward 115 deg. Holes C9010C and C9010D were drilled at the same position. Ship locations were handled as the hole locations (Table 2-1).

According to water depths of eight transponders, which had been deployed at the sea bottom surrounding the site (approx. 808 m away), the water depth at the site had been estimated 2,014 to 2,039 mMSL (meter mean sea level). The seafloor at the site was tagged at 2026.7 mMSL by lowering the bottom hole assembly before spud-in at Hole C9010A while monitoring by using Underwater TV (UWTV). After taking the first core by Hydraulic Piston Coring System (HPCS) at each hole excepting Hole C9010D, the water depths were corrected by the mud line levels in the recovered

cores (Table 2-1). Water depth at Hole C9010D was regarded as the same as Hole C9010C.

3 Core and section summaries

During Expedition 904, we cored four Holes C9010A, B, C and D. At each hole, we obtained one, 15, two and 29 cores, respectively by Hydraulic Piston Coring System (HPCS), Extended Punch Coring system (EPCS) and Extended Shoe Coring System (ESCS). Cores C9010B-10X and C9010D-22X were empty. And we cut these cores into 4, 101, 15 and 97 sections, including core catchers (Table 3-1). The total length of curated cores is 207.24 m.

4 Sampling plan and summary

4.1 Sampling plan

We took seven types of samples during this expedition (Table 4-1-1 and Fig. 4-1-1); HS (Headspace gas) for shipboard gas analyses for safety, 904HKCC, 904NMA, 904NMB, 904HKMC and 904HKMH for onshore personal research, and SS (Smear Slide) for shipboard Visual Core Description.

Most of HS samples were taken from the top of second section at all HPCS and one ESCS cores of Holes C9010A and B, and at all the EPCS and ESCS cores below 52.98 m CSF-B (core depth below sea floor, scale if long) of Holes C9010C and D excepting poorly recovered cores.

904HKCC samples, 5 cm long whole round samples, were taken usually from the bottom of core catcher at all holes.

904NMA and 904NMB samples are both 10 cm long whole round samples. At the depth shallower than 10 m CSF-B, we took 904NMA samples from every section after the X-ray CT scanning process and one 904NMB sample from the section near the depth of 10 m CSF-B before X-ray CT scanning process. At the depth deeper than 10 m CSF-B, we took 904NMA samples usually from third section after the X-ray CT scanning process. In addition to these samples, we also took 904NMA samples from every section at the cores with fluorescent microspheres.

904HKMC and 904HKMH samples are discrete samples taken from working halves, 14 cc (two 7 cc cubes) samples and 20 cc half round samples, respectively. We took one sample of 904HKMC per section at the Holes C9010C and D. And we took samples of 904HKMH per 10 cm interval at the Hole C9010C and samples of 904HKMH per 30 cm interval at the Hole C9010D.

SS samples were taken from archive halves by toothpicks at all holes.

4.2 Sample and residues summary

461 samples are taken in total, including 49 ship samples (HS and SS) and 412 personal samples. 20 residues from HS and 29 SS samples will be shipped to KCC (Table 4-2-1).

5 Operation summary

The science party and the crew embarked at Tateyama Port area on November 4th, 2009. Drilling equipments were being prepared while anchoring till November 7th. Upon completion the crew boarding including Mark James Robinson, Coring Supervisor and Curtis Wayne Lambert Coring Service Engineer on November 7th,

Chikyu left at 10:30 to the site of coring in Expedition 904 of Cruise CK09-03 off Boso Peninsula. Chikyu arrived the site at 23:00 and prepared for positioning.

The 11-7/8" coring assembly started running down at 00:45 on November 8th. At 09:15, UWTV ran in order to check the sea bottom conditions. Upon running the bottom hole assembly to the seabed, the seafloor was tagged at 2,055 m DRF (drilling depth below rig floor, 2026.7 mMSL) at 12:30. The drill string was placed 3 m above the seafloor and HPCS inner core barrel was lowered down just above the bottom hole assembly. HPCS coring was carried out at Hole C9010A at 15:31. Core C9010A-1H was shot from 3 m above the seafloor and its recovery had been expected to 6.5 m but it was 4.59 m, much less than expected. HPCS coring was re-started again at Hole C9010B at the same position as Hole C9010A at 17:10. After taken seven HPCS cores (Cores C9010B-1H thorough 7H down to 60.33 m DSF, drilling depth below sea floor) until 06:54 on November 9th, Extended Shoe Coring System (ESCS) was employed to cut Core C9010B-8X (down to 69.83 m DSF). From 69.83 to 79.33 m DSF, the formation was drilled out and no core was taken. Core C9010B-9H was on deck by using HPCS again at 13:14. When Core 9H was laid at deck, the penetration was estimated to 1.5 m from the over pull of the drill string. Top 0.8 m dropped off from the core barrel and the next 0.5 m stayed inside the core barrel top outside the core liner. Sediments in the core liner and the core catcher (2.6 m) were thought as flow-in. Consequently, Core C9010B-10X was drilled after lowered 1.5 m (from 80.83 m DSF). Later, the 2.6 m sediments in the core liner were however identified to real formation recovery by observing X-ray CT scanogram and the advancement and recovery of Core C9010B-9H was corrected to the same as the recovery 3.78 m. Core C9010B-10X was attempted by ESCS down to 90.33 m DSF, but it had empty recovery. Core C9010B-11X was drilled with a full-close finger type core catcher. Coring continued to the deeper including almost empty recovery of Core C9010B-13X and finished at 11:42 on November 10th after taken Core C9010B-16X (down to 147.33 m DSF). After sweeping the hole with high-viscosity mud water, spotting the kill mud water, and pulling out of the hole to the surface, Chikyu moved to Tateyama Port area at 22:30 on November 10th.

Upon completion the crew changing including two scientists on November 11th and 12th, 2009, Chikyu left at 13:30 and arrived Site C9010 at 23:00. HPCS coring was carried out at Hole C9010C at 01:45 on November 14th. After taking Cores C9010C-1H and 2H, pulled out of the hole above the seafloor and waited on weather. HPCS coring was re-started again at Hole C9010D at the same position as Hole C9010C at 15:00. Core C9010D-1H was shot from 14.98 m DSF, one meter above the bottom of Core C9010C-2H. After taking four HPCS Cores C9010D-1H through 4H (down to 52.98 m DSF), Extended Punching Coring System (EPCS) Cores C9010D-5X through 19X were taken from 52.98 to 193.98 m DSF. Subsequently, ESCS Cores C9010D-20X through 30X were cut down to 293.48 m DSF. After sweeping the hole with high-viscosity mud water, spotting the kill mud water, and pulling out of the hole to the surface, Chikyu moved to Tateyama Port area at 20:00 on November 17th.

6 Measurement and initial results onboard

Fig. 6-1 plans the procedure of core sample measurements and sub-samplings and Fig. 6-2 shows some parts of the results for cores at each hole. At Core Cutting Area, a palaeontologist received a part of core catcher sample and carry out microscopy by making smear slides. Three technicians placed recovered core. If needed for safety, they released pressures from core liner by putting small holes. Cores were cut into sections, whose lengths were no longer than 1.5 m. ID numbers

were issued for sections and their properties were recorded by using the database system. A technician took samples using a syringe for safety gas monitoring. He/she carried out the gas analysis downstairs. The results were reported from Lab. Officer and Assistant Lab. Officer to OSI once 12 hours. JAMSTEC Curators took samples for routine microbiological sampling (RMS) once here during the expedition.

After the sections were carried to Core Processing Deck, a technician carried out X-ray CT scan. Core sections are stored in Whole Core Reefer before measurements. In QA/QC Sampling Room, JAMSTEC Curators took RMS samples and processed them. After waiting several hours for the core sections temperature became the same as the room temperature (approx. 18.5 ˚C), some physical properties were measured non-destructively employing a Multi Sensor Core Logger (MSCL).

A few technicians split core section into working and archive halves. From the working halves, a palaeontologist took their personal samples. Another scientist took photographs of the archive halves by using a digital camera and described cores visually (VCD) for the archive halves. The VCDs were recorded into the database.

6.1 Radiolarian biostratigraphy

Most of the radiolarian slides were prepared by submersing the sample in hot water and then treating the sample with a 5 % HCl solution until the calcareous component was removed. Additionally, boiling the sample in 10 % hydrogen peroxide for 10 min was necessary if the sample was indurated. If the sediment did not fully disaggregate, the procedure was repeated. The residue was sieved using 63 μm mesh stainless-steel sieves, and the remaining siliceous microfossils were pipetted evenly onto labeled glass slides. The accompanying water was then evaporated under a heat lamp, after which the remaining residue was mounted in a suitable medium (in this instance, Norland Optical Adhesive) and covered with a 22 x 50 mm cover slip. One slide was prepared and examined for each sample. The wet residue was retained in the event that reexamination of the material proved to be necessary.

Qualitative assessments of the abundance (abundant, common, few, rare,) and preservation (good, moderately, poor) of radiolarians in each slide were recorded in the Fig. 6-1-1. In assessing the relative abundances of individual taxa, the following semiquantitative criteria were used:

A = Abundant (> 20 %);
C = Common (5 to 20 %);
F = Few (1 to 5 %);
R = Rare (0 to 1 %);

The preservation of radiolarians are good at Hole C9010B 1H-CC and 2H-CC, moderate from 3H-CC to 11X-CC, and poor from 12X-CC to 16X-CC. Radiolarians were rare through the cores. Because the low latitude species commonly occurred at the site, the low latitude Cenozic zonation of radiolarians proposed by Sanfilippo and Nigrini (1998) is adopted. The geomagnetic time scale of Cande and Kent (1995) has been applied throughout this study.

The studied sequence was divided into four zones, consisting of the RN17 (the *Buccinosphaera invaginata* Taxon-Range Zone), RN16/15 (the *Collosphaera tuberosa* Interval Zone/*Stylatractus universus* Concurrent Range Zone), RN14 (the *Amphirhopalum ypsilon* Interval Zone), and the RN13 (the *Anthocyrtidium angulare* Interval Zone) at Hole C9010B (Fig. 6-1-1). The base of RN17 was placed between 1H-CC (4.63 m CSF-B) and 2H-CC (14.13 m CSF-B) at Hole C9010B. The base of the RN16 Zone is defined by the last occurrence of S. universus, In this study, it was not placed because of the lack of S. universus. The base of RN15 was located between

3H-CC (23.63 m CSF-B) and 4H-CC (33.13 m CSF-B) at Hole C9010B. The base of RN14 was placed between 12X-CC (109.33 m CSF-B) and 14X-CC (128.33 m CSF-B) at Hole C9010B.

For the construction of the age-depth models for the Pleistocene sequence at Site C9010, we plotted the radiolarian events (Fig. 6-1-1).

6.2 Safety gas monitoring

In order to monitor gases for safety, we took samples from the tops of the second sections of Cores C9010A-1H, B-1H through 9H and D-6X and below, excepting poorly recovered cores (Cores C9010B-10X, 13X, D-8X, 10X, 11X, 17X through 20X, 22X and 24X through 30X). The 5 cc of sediment samples were taken by putting a syringe into cored sediments twice (to 4 cm deep from the top of the section) at Core Cutting Area immediately after core was cut into sections. The samples were put into 20 cc pre-combusted glass vials and sealed. We employed a gas chromatograph (GC) that has a flame ionization detector (FID) in order to measure concentrations of methane, ethane, propane, iso-butane, n-butane, ethylene, and propylene in the headspace gases quantitatively. Headspace gas sampler equipped with the GC introduced 5 cc gases automatically after 70˚C and 30 minutes heating.

Only methane was detected and the other six species of gases were not detected at all from any samples (the data will be available at [http://sio7.jamstec.go.jp]). The methane concentrations were quite low (no more than 12 ppm) in Cores C9010A-1H and C9010B-1H (1.41 and 1.43 m CSF-B, respectively, Fig. 6-2-1). Cores C9010B-2H through 9H and C9010D-6X through 16X (5.97 to 157.39 m CSF-B) showed concentrations between 3.8 to 15×10^3 ppm, excepting Core C9010B-3H, C9010D-9X and 16X (15.31, 92.26 and 157.39 m CSF-B) recorded high concentration of 32, 21 and 23×10^3 ppm, respectively. The methane was not detected from Cores C9010D-21X or 23X.

6.3 X-ray CT scanning

X-ray computed tomography (CT) scanning was carried out for the 208 section out of all the 217 sections. Once in every 24 hours, we measured a check piece that consists of aluminium, water and air. Axial images were taken once in every 0.625 mm, and sections with typical lengths 1.4 m had 2,240 axial images each. Each axial image covered 96×96 mm area by 512×512 pixels. Each pixel height and width was 0.1875 mm (Axial image files will be available at [http://sio7.jamstec.go.jp]).

6.4 Nondestructive physical properties

For all the core sections, excepting core catcher sections, physical properties of P-wave velocity, gamma ray attenuation density, magnetic susceptibility, (non-contact) electrical resistivity and natural gamma radiation were measured by using a Multi Sensor Core Logger (MSCL) (Fig. 6-2; Numerical data of the results will be available at [http://sio7.jamstec.go.jp]). For Cores C9010C-1H and 2H, natural gamma radiation could not be measured due to a trouble on the control software program. As mentioned already, some series of whole-round samples were taken, and the physical properties measurements could not be done for such intervals.

6.5 Visual core description

6.5.1 Sediments and Sedimentary Rocks

Graphic and verbal core descriptions, smear-slide, sample locations, drilling disturbance, and biostratigraphic information constitute the shipboard data summarized on the core description forms in this volume. These sheets represent time-constrained field notes taken on board ship. Some ambiguities or discrepancies may be present.

The core description forms summarize the data obtained during shipboad analysis of each sediment core, which have been recorded in detail on a section-by-section basis on visual core description forms, or J-CORES VCD. Information recorded on the VCD is available as a searchable database through Chikyu Laboratory Data Center (http://sio7.jamstec.go.jp). This expedition used the IODP sediment classification scheme for sediments.

6.5.2 Sediment Disturbance

The degree of drilling disturbance for soft sediments is described using the following categories:

Slightly disturbed = bedding contacts are slightly bent;
Moderately disturbed = bedding contacts are extremely bowed;
Highly disturbed = bedding is completely disturbed and, in some cases, shows symmetrical diapir-like or flow structures; and
Soupy = intervals are water saturated and have lost all original structure.

6.5.3 Colour

Colours were determined by comparison with the Standard Soil Color Charts (Oyama and Takehara, 2005). Colours were determined immediately after the cores were split because chemical changes may occur when deep-sea sediments are exposed to the atmosphere (Moberly and Klein, 1976). Information on core colours is given in the text of the ‘Lithologic Description’ on the core description forms.

6.5.4 Smear Slides

Routine observations that were made include sample location, whether the lithology sampled was dominant or minor, an estimate of grain-size distribution, and estimates of the relative abundance of various components (Table 6-5-4-1). To characterize percentage estimates but maintained semiquantitative categories to facilitate the interpretation of plots of stratigraphic trends in sediment composition as follows:

N = none;
VR = very rare (0 to 3 %);
R = rare (3 to 10 %);
C = common (10 to 20 %); and
A = abundant (> 20 %).

6.5.5 Lithologic Description

Intervals: C9010A-1H-1, 0 cm through 1H-CC; C9010B-1H-1, 0 cm through 16X-CC; C9010C-1H-1, 0 cm through 2H-CC; C9010D-1H-1, 0 cm through 30X-CC

Depth: 0--4.59 m CSF-B, Hole C9010A; 0--147.33 m CSF-B, Hole C9010B; 0--15.98 m CSF-B, Hole C9010C; 0--293.48 m CSF-B
Thichness: 4.59 m, Hole C9010A; 105.56 m, Hole C9010B; 15.98 m, Hole C9010C; 74.84 m, Hole C9010D
Age: Pleistocene

Sediments are composed primarily of olive gray and dark gray silty clay, which consists of nannofossils, volcanish glass, silt, and clay, with foraminifers, radiolarians, diatoms, siliceous dinoflagellata, and sponge spicules. Nannofossils are common from Hole C9010B-1H to 3H, and rare from 4H to 16X. Radiolarians and diatoms are rare throughout the cores. Mafic vitric sand and silt are mainly composed of brown and opaque glass with variable amounts of orthopyroxene, clinopyloxene, and plagioclase crystals that are rare to few throughout the cores. On the other hand, the felsic sediments consist of translucent bubble-wall and pumice-type glass shards with only minor crystals. Several layers show normal grading, but scoured bases are rare. The sediments are variably mafic and dark colored or felsic and light colored; however, the total thickness of mafic sand is almost twice that of felsic sand. Many intervals are mixtures of mafic and felsic vitric material. Scoriaceous and puniceous prbble to granule gravel beds, from 5 to 50 cm in thickness, occur mainly in the middle part of sequence at Hole C9010B (Cores C9010B-4H through 12X).

6.6 Feasibility study for routine microbiological sampling

Whole round core samples were taken for a feasibility study for Routine Microbiological Sampling (RMS) which will be held in future IODP expeditions. In this study, tentative RMS workflow, including, sample processing, preparation of tools, and condition of storage, was simulated by onboard technicians and curatorial staffs.

6.6.1 Sample processing

Sample coded as 904NMB and 904NMAwere taken as 10 cm whole round cores. To evaluate the effect of timing of sampling during the core processing, samples coded as 904NMB were taken before X-ray CT scanning at Core Cutting Area, whereas those coded as 904NMA were taken at QA/QC Sampling Room after X-ray CT scanning followed by MSCL-W logging.

During the sample processing at Core Cutting Area, spatulas rubbed with alcohol and autoclaved end-caps were used for treating the cut surfaces of microbiological samples (Fig. 6-6-1a). People working for these treatments wore latex gloves and frequently wash their hands with kitchen detergent and sterilized them with rubbing alcohol (Fig. 6-6-1b).

Microbiological samples were cut from sections with rotary core cutter (Figs. 6-6-2a, b). Samples were sealed with end-caps and vinyl tapes, and labelled with J-CORES numbering (Fig. 6-6-2c).

Using an anaerobic workbench, each sample was sealed in a gas-barrier zipping bag with an O_2-absorbing and CO_2 generating agent (Figs. 6-6-3a, b). The bag was clipped with a plastic clipper to confirm the seal. During the process of anaerobic packing, ice gel packs were used to keep the samples cold in the warm atmosphere of anaerobic workbench (Figs. 6-6-3c, d).

Samples put in anaerobic bags were stored at 4˚C refrigerator. Each WRCs used for contamination test was sealed in a Ziploc bag and stored at 4˚C without

anaerobic packing. These samples will be used for storage tests with various temperature conditions at Kochi Core Center. Evaluation of these samples for microbiological use will be performed after the storage tests.

6.6.2 Preparation of tools for microbiological sampling

Spatulas and end-caps were washed with kitchen detergent and sterilized using rubbing alcohol (70% ethanol) and/or autoclaves during the actual sampling. Before the actual sampling, we tested spatulas and end-caps for durability against sterilization using ethanol and/or autoclaves.

Wooden handled spatulas used in the Core Cutting Area were autoclaved at 121 ˚C for 20 minutes. This sterilization process results in a severe exsolution of wooden tar and possibly, colorant (Fig. 6-6-4). Thus we avoid autoclaving for wooden handled spatulas during actual sampling.

Two types of end-caps were tested for autoclave durability: the old-type which has been used for core processing on Chikyu for years, and the new-type which is currently used (Fig. 6-6-5). These end-caps were wiped with ethanol and subsequently processed with an autoclave. The old-type caps were durable for rubbing with 99.5% ethanol and autoclave processing at 121 ˚C for 20 minutes. The new-type caps were also durable for 99.5% ethanol, but heavily damaged with autoclave processing even at the temperature of 105 ˚C, which was the lowest temperature available for the onboard autoclave machine.

6.6.3 Durability of sample containers for storage at -80˚C

Sample containers were tested for durability for -80˚C storage (Fig. 6-6-6). As test samples, oceanic mud was put in whole round core-liners and sealed with end-caps and vinyl-tapes. Samples were labelled with dummy stickers printed by J-CORES, and put in gas-barrier plastic bags with zippers and firmly sealed with plastic clips. Even within 1 day after -80˚C storage started, a clack was formed on the new type end-cap (Fig. 6-6-6b). In contrast, no clack was found on the old type end-cap even past 10 days after the storage started. It found to be important that material of end-cap should be considered to use for RMS.

6.6.4 Tracer experiment using fluorescent microspheres

We evaluated the potential contamination from the drilling fluids using microsphere beads set on the core barrel. Tracer experiment was conducted three coring systems (HPCS, EPCS and ESCS) by attaching five sets of plastic bags containing 50 ml of fluorescent microspheres suspension inside the core catcher (Fig. 6-6-7).

In the HPCS coring, the experiments were done for Cores C9010D-3H and 4H. All the four broken empty plastic bags were found: two above the core liner of Core 3H (Fig. 6-6-8a), one above the core liner of Core 4H (Fig. 6-6-8b) and the other at the lower part in the core liner of the Core 4H (Fig.6-6-8c). In the EPCS coring, the experiment was done for Core C9010D-13X. A broken empty bag was found at Female Quick Release at the top of the lower inner barrel assembly. The other one was not found. In the ESCS coring, the experiments were done for Cores C9010D-20X and 22X. Core 20X, onto which only one bag was attached, was on deck with empty core recovery. The bag was not found while a piece of the bag was remained on the spacer. We decided to try once more. Two bags were attached onto the spacer for Core 22X. The core barrel had a broken empty bag near the bottom inside the core liner and the other one was remained in the spacer; it was not broken and kept the

suspension while the bag was torn at the stitch line (Fig. 6-6-9). The core 22X recovery was also empty.

Tracer experiments seemed to be succeeded except for the ESCS cores, which were no recovery. We will conduct microscopy on the recovered cores to find the fluorescent microspheres onshore after the expedition.

6.7 Biostratigraphy Sampling

We picked up three types of the micropalaeontological samples for biostratigraphy as follows: 904HKCC, a 5 cm thickness whole round sample (175 cc) at the bottom end of the core catcher; 904HKMC, 2 cubes (7 cc each; total 14 cc) on a horizon per section from the working halves; 904HKMH, a 2 cm thickness half round sample (about 20 cc) par 10 cm from the working halves. We had planned to take 904HKMH samples every 10 cm (0, 10, 20, … cm) except for a sample from 30 cm depth as 904HKMC.

We collected 904HKCC samples from all cores and the other two types only from the cores of the Holes 904-C9010C and D. We took 904HKMH samples every 30 cm (60, 90, 120 cm) from the cores of the Hole D. The sampling frequency was less than planned, because we didn't have enough time and manpower. According to the macroscopic visual observation of the sediments, we changed the sampling horizons within sections to collect fine hemipelagic sediments, which had been expected to contain microfossils well, except for the 904HKCC samples of the Holes C and D.

At the offshore laboratory, we have preliminarily tried to extract microfossils from each 904HKCC sample to check if it contains enough fossils (see Section 6.1). The residues of them and the other two series' of samples will be observed in detail at onshore laboratories. 904HKMC samples will be also used to measure the density and the mass accumulation rate of the sediments before extracting fossils.

6.7.1 Sampling methods

904HKCC samples were cut out from the core catcher samples (Fig. 6-7-1). About 10 cc of each samples were used to the onboard observation and the residues of them were packed in plastic bags.

904HKMC samples were filled in the plastic cubes for paleomagnetics to measure the exact volume of flesh sediments (Fig. 6-7-2). At some sampling horizons where the sediments are relatively consolidated, we slit them up with a spatula at first and drove the cubes into them with a plastic hammer. It was unavoidable to disturb the sediments around the sampling horizons, because we had to claw with a spatula through the cubes pushed into the soft sediments. A small opening for ventilation on the bottom of the cube was sealed with a label in order to prevent from drying out. Each pair of cubed samples was packed in a plastic bag. The bags were manually deflated and zipped.

904HKMH samples were picked up by using a stainless steel scoop. We used a reshaped spatula with two notches (5 mm depth) which fit the edges of the scoop, and swept out the rim part of the sediments sticking on the scoop (Fig. 6-7-3), because the rim of the core sample might be disturbed and contaminated due to the drilling process. In order to save operational troubles, we tried some other tools beforehand and finally chose using a scoop for 2 cm thickness quarter round sampling. The collected sediments were also packed in plastic bags.

7 Core quality evaluation

During this training cruise, three coring systems were employed: Hydraulic Piston Coring System (HPCS), Extended Punching Coring System (EPCS) and Extended Shoe Coring System (ESCS). The operation criteria for each coring systems had been defined as the followings: HPCS, do not apply under the overpull 100 kN or continuous shallow penetration in order to avoid risky overdrill situation; EPCS, unemployable if any damages are observed on the shoe or rate of penetration (ROP) become slower than 10 m/hour; ESCS, terminate drilling if weight on bit (WOB) exceeds 60 kN. We evaluated the qualities of the recovered cores on condition that this expedition was during the training cruise and the coring was operated under such safe criteria.

We collected 1, 16, 2, and 29 cores (excluding empty cores) from the Holes A, B, C, and D, respectively. Holes A and C cores were collected with HPCS down to 4.57 and 15.98 m DSF, respectively. Hole B cores were collected with both HPCS and ESCS down to 145.82 m DSF. Hole D cores were collected with HPCS down to 52.98 m DSF and with ESCS down to 293.48 m DSF.

Core recoveries were low below the Core 9H at the hole B and below the Core 5X at the Hole D. Thick, unconsolidated scoria layers and sandy sediments might not be kept their intact form during drilling rotation and subsequent pull out and retrieval of the core. Some of those layers and surrounding hemipelagic sediment layers would also be lost. Discontinuity in the sedimentary cores requires frequent determinations of age between gaps, making cautious interpretation on the core.

Horizontal cracks were detected abundantly from the silty clay sediment layers below 14 m CSF-B; Cores 3H to 6H from the Hole B and Cores 1H to 4H from the Hole D. These were probably caused by core dragging tension or gas expansion. Small, but abundant long-vertical cracks were well observed from X-ray CT images in the cores drilled by ESCS (Cores 11X to 16X from the Hole B; Fig. 7-1), probably due to rotation of core liners. Horizontal and vertical cracks themselves do not cause fatal contamination or damage on micropalaeontological works, but the cracks make it difficult for quantitative sampling of sediments and easier handling during samplings. Vertical cracks in silty clay layers made by ESCS severely affect to geophysical, microbiological and geochemical works, because the water or gasses pass through the cracks and contaminated upper and/or lower layers significantly.

Downward dragging in marginal part of cores were observed at the C9010B-2H-7, B-5H-2, 4, 5, 8, 9, B-6H-2, 3, D-3H-3, 7, 8, and D-4H-4. Except C9010B-5H-4 where the dragging occurred in silty clay sediments, all the dragging were observed at volcanic ash or gravel layers. When we need a sampling from these layers, we need to remove outer part of sediments for ensuring that the samples consist of same geological layer only.

As a whole, at the silt or clay layers, both HPCS and ESCS worked substantially for samplings on micropalaeontological studies. At the volcanic sand layers and siliciclastic sand layers, all coring systems, i.e., HPCS, EPCS, ESCS, represent low recovery because of unconsolidated, relatively large grain size sediments.

References

Cande, S.C., Kent, D.V., 1995. Revised calibration of the geomagnetic polarity time scale for the Late Cretaceous and Cenozoic. J. Geophys. Res. 100, 6093-6095.

Moberly, R., Klein, G.deV., 1976. Ephemeral color in deep-sea cores. J. Sediment. Petrol. 46, 216-225.
Oyama, M., Takehara, H., 2005. Revised Standard Soil Color Charts. Nippon Sikiken company.
Sanfilippo, A., Nigrini, C., 1998. Code numbers for Cenozoic low latitude radiolarian biostratigraphic zones and GPTS conversion tables. M. Micropaleont. 33, 109-156.

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Tables

Table 2-1: Holes drilled during Cruise CK09-03 Expedition 904.

Hole	Latitude (N)		Longitude (E)		Water Depth (meter below mean sea level)
	(degree)	(arc minute)	(degree)	(arc minute)	
904-C9010A	34	33.4500	139	53.4000	2028.61
904-C9010B	34	33.4500	139	53.4000	2028.57
904-C9010C	34	33.4431	139	53.4178	2028.72
904-C9010D	34	33.4431	139	53.4178	2028.72

Table 3-1: Section list of each hole including section curated length and its depth.

Expedition	904	Site	C9010A
Expedition name	CHIKYU SHAKE DOWN 904		

Section Summary

Section	Section curated length (m)	Top Depth [m CSF-A]	Bottom Depth [m CSF-A]	Top Depth [m CSF-B]	Bottom Depth [m CSF-B]	Core Comment	Section Comment
C9010A-1H-1	1.41	0	1.41	0	1.41		
C9010A-1H-2	1.405	1.41	2.815	1.41	2.815	HPCS	
C9010A-1H-3	1.03	2.815	3.845	2.815	3.845		
C9010A-1H-CC	0.365	3.845	4.21	3.845	4.21		

Note: [m CSF-B] means a depth below sea floor by virtual compressed depth.

Expedition 904 Site C9010B
Expedition name CHIKYU SHAKE DOWN 904

Section Summary

Section	Section curated length (m)	Top Depth [m CSF-A]	Bottom Depth [m CSF-A]	Top Depth [m CSF-B]	Bottom Depth [m CSF-B]	Core Comment	Section Comment
C9010B-1H-1	1.43	0	1.43	0	1.43		
C9010B-1H-2	1.44	1.43	2.87	1.43	2.87	HPCS	
C9010B-1H-3	1.4	2.87	4.27	2.87	4.27		
C9010B-1H-CC	0.3	4.27	4.57	4.27	4.57		
C9010B-2H-1	1.41	4.63	6.04	4.63	5.968		
C9010B-2H-2	1.405	6.04	7.445	5.968	7.302		
C9010B-2H-3	1.405	7.445	8.85	7.302	8.635		
C9010B-2H-4	1.415	8.85	10.265	8.635	9.978	HPCS	
C9010B-2H-5	1.42	10.265	11.685	9.978	11.326		
C9010B-2H-6	1.435	11.685	13.12	11.326	12.687		
C9010B-2H-7	1.26	13.12	14.38	12.687	13.883		
C9010B-2H-CC	0.255	14.38	14.635	13.883	14.125		
C9010B-3H-1	1.32	14.13	15.45	14.13	15.307		
C9010B-3H-2	1.315	15.45	16.765	15.307	16.48		
C9010B-3H-3	1.36	16.765	18.125	16.48	17.694		
C9010B-3H-4	1.36	18.125	19.485	17.694	18.907		
C9010B-3H-5	1.355	19.485	20.84	18.907	20.115	HPCS	
C9010B-3H-6	1.31	20.84	22.15	20.115	21.284		
C9010B-3H-7	1.305	22.15	23.455	21.284	22.448		
C9010B-3H-8	0.8	23.455	24.255	22.448	23.162		
C9010B-3H-CC	0.52	24.255	24.775	23.162	23.625		
C9010B-4H-1	0.395	23.63	24.025	23.63	23.982		Expand from top side
C9010B-4H-2	1.335	24.025	25.36	23.982	25.17		
C9010B-4H-3	1.325	25.36	26.685	25.17	26.35		
C9010B-4H-4	1.18	26.685	27.865	26.35	27.401		
C9010B-4H-5	1.3	27.865	29.165	27.401	28.558	HPCS	
C9010B-4H-6	1.305	29.165	30.47	28.558	29.72		
C9010B-4H-7	1.3	30.47	31.77	29.72	30.877		
C9010B-4H-8	1.31	31.77	33.08	30.877	32.044		
C9010B-4H-9	0.715	33.08	33.795	32.044	32.68		
C9010B-4H-CC	0.505	33.795	34.3	32.68	33.13		
C9010B-5H-1	0.36	33.13	33.49	33.13	33.478		Remained the top of barrel
C9010B-5H-2	0.725	33.49	34.215	33.478	34.18		
C9010B-5H-3	0.975	34.215	35.19	34.18	35.123		
C9010B-5H-4	1.03	35.19	36.22	35.123	36.119		
C9010B-5H-5	1.405	36.22	37.625	36.119	37.479	HPCS	
C9010B-5H-6	1.405	37.625	39.03	37.479	38.838		
C9010B-5H-7	1.4	39.03	40.43	38.838	40.192		
C9010B-5H-8	1.415	40.43	41.845	40.192	41.561		
C9010B-5H-9	0.885	41.845	42.73	41.561	42.417		
C9010B-5H-CC	0.215	42.73	42.945	42.417	42.625		
C9010B-6H-1	0.815	42.63	43.445	42.63	43.387		Remain the top of core and expand from top side
C9010B-6H-2	0.875	43.445	44.32	43.387	44.199		
C9010B-6H-3	1.405	44.32	45.725	44.199	45.504		
C9010B-6H-4	1.41	45.725	47.135	45.504	46.813		
C9010B-6H-5	1.405	47.135	48.54	46.813	48.118	HPCS	
C9010B-6H-6	1.405	48.54	49.945	48.118	49.423		
C9010B-6H-7	1.41	49.945	51.355	49.423	50.732		
C9010B-6H-8	1.455	51.355	52.81	50.732	52.084		
C9010B-6H-CC	0.05	52.81	52.86	52.084	52.13		All to 904HKCC
C9010B-7H-1	1.405	52.13	53.535	52.13	53.528		
C9010B-7H-2	1.4	53.535	54.935	53.528	54.921		
C9010B-7H-3	1.41	54.935	56.345	54.921	56.325		
C9010B-7H-4	1.405	56.345	57.75	56.325	57.723	HPCS	
C9010B-7H-5	1.405	57.75	59.155	57.723	59.121		
C9010B-7H-6	0.945	59.155	60.1	59.121	60.061		
C9010B-7H-CC	0.275	60.1	60.375	60.061	60.335		
C9010B-8X-1	1.41	60.33	61.74	60.33	61.74		
C9010B-8X-2	1.405	61.74	63.145	61.74	63.145		
C9010B-8X-3	1.405	63.145	64.55	63.145	64.55	ESCS	
C9010B-8X-4	1.095	64.55	65.645	64.55	65.645		
C9010B-8X-5	0.56	65.645	66.205	65.645	66.205		
C9010B-8X-CC	0.3	66.205	66.505	66.205	66.505		

*Drilled out (9.5 m)

C9010B-9H-1	1.27	79.33	80.6	79.33	80.59		Replaced Liner / Disturbed
C9010B-9H-2	1.405	80.6	82.005	80.59	81.984	HPCS	
C9010B-9H-3	0.87	82.005	82.875	81.984	82.847		
C9010B-9H-CC	0.26	82.875	83.135	82.847	83.105		
*Core 10X was no recovery						ESCS	
C9010B-11X-1	1.41	90.33	91.74	90.33	91.74		
C9010B-11X-2	1.4	91.74	93.14	91.74	93.14		
C9010B-11X-3	1.415	93.14	94.555	93.14	94.555	ESCS	
C9010B-11X-4	1.405	94.555	95.96	94.555	95.96		
C9010B-11X-5	0.4	95.96	96.36	95.96	96.36		
C9010B-11X-CC	0.16	96.36	96.52	96.36	96.52		
C9010B-12X-1	1.24	99.83	101.07	99.83	101.07		
C9010B-12X-2	1.05	101.07	102.12	101.07	102.12	ESCS	
C9010B-12X-CC	0.145	102.12	102.265	102.12	102.265		
C9010B-13X-CC	0.02	109.33	109.35	109.33	109.35	ESCS	Scoria gravels No WH, Only AH No X-CT image, MSCL-W data, and photo.
C9010B-14X-1	1.4	118.83	120.23	118.83	120.23		
C9010B-14X-2	1.205	120.23	121.435	120.23	121.435		
C9010B-14X-3	1.2	121.435	122.635	121.435	122.635	ESCS	
C9010B-14X-4	1.105	122.635	123.74	122.635	123.74		
C9010B-14X-5	0.57	123.74	124.31	123.74	124.31		
C9010B-14X-CC	0.15	124.31	124.46	124.31	124.46		

C9010B-15X-1	1.335	128.33	129.665	128.33	129.632		
C9010B-15X-2	1.14	129.665	130.805	129.632	130.744		
C9010B-15X-3	1.055	130.805	131.86	130.744	131.773		
C9010B-15X-4	1.04	131.86	132.9	131.773	132.787		
C9010B-15X-5	0.905	132.9	133.805	132.787	133.67	ESCS	
C9010B-15X-6	1.09	133.805	134.895	133.67	134.733		
C9010B-15X-7	1.24	134.895	136.135	134.733	135.943		
C9010B-15X-8	0.745	136.135	136.88	135.943	136.669		Replaced Liner / Disturbed
C9010B-15X-9	0.985	136.88	137.865	136.669	137.63		Replaced Liner / Disturbed
C9010B-15X-CC	0.205	137.865	138.07	137.63	137.83		
C9010B-16X-1	1.01	137.83	138.84	137.83	138.84		
C9010B-16X-2	0.965	138.84	139.805	138.84	139.805		
C9010B-16X-3	0.34	139.805	140.145	139.805	140.145		
C9010B-16X-4	1.285	140.145	141.43	140.145	141.43	ESCS	
C9010B-16X-5	1.41	141.43	142.84	141.43	142.84		
C9010B-16X-6	1.41	142.84	144.25	142.84	144.25		
C9010B-16X-7	1.42	144.25	145.67	144.25	145.67		
C9010B-16X-CC	0.145	145.67	145.815	145.67	145.815		

Note: [m CSF-B] means a depth below sea floor by virtual compressed depth.

Expedition 904 Site C9010C

Expedition name CHIKYU SHAKE DOWN 904

Section Summary

Section	Section curated length (m)	Top Depth [m CSF-A]	Bottom Depth [m CSF-A]	Top Depth [m CSF-B]	Bottom Depth [m CSF-B]	Core Comment	Section Comment
C9010C-1H-1	1.405	0	1.405	0	1.405		
C9010C-1H-2	1.4	1.405	2.805	1.405	2.805		
C9010C-1H-3	1.41	2.805	4.215	2.805	4.215	HPCS	
C9010C-1H-4	1.405	4.215	5.62	4.215	5.62		
C9010C-1H-5	0.58	5.62	6.2	5.62	6.2		
C9010C-1H-CC	0.26	6.2	6.46	6.2	6.46		
C9010C-2H-1	1.41	6.48	7.89	6.48	7.758		
C9010C-2H-2	1.45	7.89	9.34	7.758	9.073		
C9010C-2H-3	1.41	9.34	10.75	9.073	10.351		
C9010C-2H-4	1.475	10.75	12.225	10.351	11.688		
C9010C-2H-5	1.405	12.225	13.63	11.688	12.961	HPCS	
C9010C-2H-6	1.43	13.63	15.06	12.961	14.258		
C9010C-2H-7	1.005	15.06	16.065	14.258	15.169		
C9010C-2H-8	0.625	16.065	16.69	15.169	15.735		
C9010C-2H-CC	0.275	16.69	16.965	15.735	15.984		

Note: [m CSF-B] means a depth below sea floor by virtual compressed depth.

Expedition 904 Site C9010D
Expedition name CHIKYU SHAKE DOWN 904

Section Summary

Section	Section curated length (m)	Top Depth [m CSF-A]	Bottom Depth [m CSF-A]	Top Depth [m CSF-B]	Bottom Depth [m CSF-B]	Core Comment	Section Comment
C9010D-1H-1	1.42	14.98	16.4	14.98	16.253		
C9010D-1H-2	1.505	16.4	17.905	16.253	17.601		
C9010D-1H-3	1.415	17.905	19.32	17.601	18.87		
C9010D-1H-4	1.485	19.32	20.805	18.87	20.201		
C9010D-1H-5	1.44	20.805	22.245	20.201	21.491	HPCS	
C9010D-1H-6	1.21	22.245	23.455	21.491	22.576		
C9010D-1H-7	1.005	23.455	24.46	22.576	23.476		
C9010D-1H-8	0.715	24.46	25.175	23.476	24.117		
C9010D-1H-CC	0.405	25.175	25.58	24.117	24.48		
C9010D-2H-1	0.31	24.48	24.79	24.48	24.764		Disturbed / Replaced Liner
C9010D-2H-2	1.405	24.79	26.195	24.764	26.053		
C9010D-2H-3	1.405	26.195	27.6	26.053	27.341		
C9010D-2H-4	1.1	27.6	28.7	27.341	28.35		
C9010D-2H-5	1.25	28.7	29.95	28.35	29.496	HPCS	
C9010D-2H-6	1.405	29.95	31.355	29.496	30.784		
C9010D-2H-7	1.405	31.355	32.76	30.784	32.073		
C9010D-2H-8	1	32.76	33.76	32.073	32.99		
C9010D-2H-9	0.625	33.76	34.385	32.99	33.563		
C9010D-2H-CC	0.46	34.385	34.845	33.563	33.985		
C9010D-3H-1	1.275	33.98	35.255	33.98	35.255		Disturbed / Replaced Liner
C9010D-3H-2	0.905	35.255	36.16	35.255	36.16		
C9010D-3H-3	1.3	36.16	37.46	36.16	37.46		
C9010D-3H-4	1.405	37.46	38.865	37.46	38.865	HPCS / Used microspheres	
C9010D-3H-5	1.415	38.865	40.28	38.865	40.28		
C9010D-3H-6	1.27	40.28	41.55	40.28	41.55		
C9010D-3H-7	0.995	41.55	42.545	41.55	42.545		
C9010D-3H-8	0.745	42.545	43.29	42.545	43.29		
C9010D-3H-CC	0.155	43.29	43.445	43.29	43.445		
C9010D-4H-1	0.265	43.48	43.745	43.48	43.73		Disturbed
C9010D-4H-2	1.355	43.745	45.1	43.73	45.01		
C9010D-4H-3	1.385	45.1	46.485	45.01	46.318		
C9010D-4H-4	1.4	46.485	47.885	46.318	47.64		
C9010D-4H-5	1.415	47.885	49.3	47.64	48.976	HPCS / Used microspheres	
C9010D-4H-6	1.1	49.3	50.4	48.976	50.015		
C9010D-4H-7	1.405	50.4	51.805	50.015	51.342		
C9010D-4H-8	0.805	51.805	52.61	51.342	52.102		
C9010D-4H-9	0.73	52.61	53.34	52.102	52.791		
C9010D-4H-CC	0.195	53.34	53.535	52.791	52.975		
C9010D-5X-1	0.23	52.98	53.21	52.98	53.21	EPCS	
C9010D-5X-CC	0.245	53.21	53.455	53.21	53.455		
C9010D-6X-1	1.41	62.48	63.89	62.48	63.89		
C9010D-6X-2	1.31	63.89	65.2	63.89	65.2	EPCS	
C9010D-6X-CC	0.115	65.2	65.315	65.2	65.315		
C9010D-7X-1	1.38	71.98	73.36	71.98	73.36		
C9010D-7X-2	1.135	73.36	74.495	73.36	74.495		
C9010D-7X-3	0.62	74.495	75.115	74.495	75.115	EPCS	
C9010D-7X-4	0.77	75.115	75.885	75.115	75.885		
C9010D-7X-CC	0.26	75.885	76.145	75.885	76.145		
C9010D-8X-CC	0.01	81.48	81.49	81.48	81.49	EPCS	No WH only AH / No X-CT image, MSCL-W data, and photo.
C9010D-9X-1	1.28	90.98	92.26	90.98	92.26		
C9010D-9X-2	1.015	92.26	93.275	92.26	93.275		
C9010D-9X-3	0.86	93.275	94.135	93.275	94.135	EPCS	
C9010D-9X-4	1.265	94.135	95.4	94.135	95.4		
C9010D-9X-CC	0.27	95.4	95.67	95.4	95.67		
C9010D-10X-1	0.12	98.98	99.1	98.98	99.1	EPCS	
C9010D-10X-CC	0.36	99.1	99.46	99.1	99.46		
C9010D-11X-CC	0.01	108.48	108.49	108.48	108.49	EPCS	No WH only AH / No X-CT image, MSCL-W data, and photo.

C9010D-12X-1	0.885	117.98	118.865	117.98	118.865	EPCS	
C9010D-12X-CC	0.29	118.865	119.155	118.865	119.155		
C9010D-13X-1	0.96	127.48	128.44	127.48	128.44	HPCS / Used microspheres	
C9010D-13X-2	0.575	128.44	129.015	128.44	129.015		
C9010D-13X-CC	0.21	129.015	129.225	129.015	129.225		
C9010D-14X-1	1.4	136.98	138.38	136.98	138.38		
C9010D-14X-2	1.035	138.38	139.415	138.38	139.415	EPCS	
C9010D-14X-CC	0.17	139.415	139.585	139.415	139.585		
C9010D-15X-1	1.4	146.48	147.88	146.48	147.88		
C9010D-15X-2	1.405	147.88	149.285	147.88	149.285		
C9010D-15X-3	1.01	149.285	150.295	149.285	150.295	EPCS	
C9010D-15X-4	0.725	150.295	151.02	150.295	151.02		
C9010D-15X-CC	0.385	151.02	151.405	151.02	151.405		
C9010D-16X-1	1.405	155.98	157.385	155.98	157.385		
C9010D-16X-2	1.38	157.385	158.765	157.385	158.765		
C9010D-16X-3	1.405	158.765	160.17	158.765	160.17	EPCS	
C9010D-16X-4	0.62	160.17	160.79	160.17	160.79		
C9010D-16X-CC	0.36	160.79	161.15	160.79	161.15		
C9010D-17X-CC	0.05	165.48	165.53	165.48	165.53	EPCS	All to 904HKCC
C9010D-18X-1	0.21	174.98	175.19	174.98	175.19	EPCS	
C9010D-18X-CC	0.235	175.19	175.425	175.19	175.425		
C9010D-19X-1	0.895	184.48	185.375	184.48	185.375	EPCS	
C9010D-19X-CC	0.105	185.375	185.48	185.375	185.48		
C9010D-20X-CC	0.01	193.98	193.99	193.98	193.99	ESCS / Used microspheres	No WH only AH / No X-CT image, MSCL-W data, and photo.
C9010D-21X-1	0.505	203.48	203.985	203.48	203.985		
C9010D-21X-2	0.745	203.985	204.73	203.985	204.73	ESCS	
C9010D-21X-CC	0.31	204.73	205.04	204.73	205.04		
*Core 22X was no recovery						ESCS / Used microspheres	
C9010D-23X-1	0.71	217.48	218.19	217.48	218.19		
C9010D-23X-2	0.545	218.19	218.735	218.19	218.735	ESCS	
C9010D-23X-CC	0.455	218.735	219.19	218.735	219.19		
C9010D-24X-CC	0.135	226.98	227.115	226.98	227.115	ESCS	
C9010D-25X-CC	0.05	236.48	236.53	236.48	236.53	ESCS	All to 904HKCC
C9010D-26X-CC	0.05	245.98	246.03	245.98	246.03	ESCS	All to 904HKCC
C9010D-27X-1	0.67	255.48	256.15	255.48	256.15		Replaced liner
C9010D-27X-2	0.54	256.15	256.69	256.15	256.69	ESCS	Replaced liner / Disturbed
C9010D-27X-CC	0.31	256.69	257	256.69	257		
C9010D-28X-1	0.825	264.98	265.805	264.98	265.805	ESCS	
C9010D-28X-CC	0.3	265.805	266.105	265.805	266.105		
C9010D-29X-CC	0.01	274.48	274.49	274.48	274.49	ESCS	No WH only AH / No X-CT image, MSCL-W data, and photo.
C9010D-30X-CC	0.49	283.98	284.47	283.98	284.47	ESCS	

Note: [m CSF-B] means a depth below sea floor by virtual compressed depth.

Table 4-1-1: Summarized table of sample requests submitted to Exp. 904.

#	Requester	Sample Code	Requesting Materials	Storing condition	Status		The number of samples taken
1	Naokazu Ahagon Takamitsu Sugihara	904NAE	**Educational Purpose** We do not request specific horizon, core section, or core lithology beforehand Need soft to consolidated sediment samples that are cored by several coring tools (HPCS, EPCS, ESCS and RCB) Sample will be requested after core is recovered. Samples will be taken after sampling for requests #3 and #4, even if these samplings are done onshore after the expedition	**Need information about storing condition.**	Approved on 29th Oct. But detailed request will be need after sampling for request No. 3 and 4 finish.		-
		NA	**Educational Purpose** Data of onboard measurements acquired during EXP 904 and 905 The requested measurement data: ·X-ray CT scanner, ·MSCL-W, ·Moisture and Density, ·Interstitial Water chemistry (e.g., refractive index (salinity), alkalinity, pHm, Cl content, major cations, minor to trace cations, and anions), ·Thermal Conductivity, ·Bulk Chemistry (major and trace elements), ·MSCL-I, ·MSCL-C, ·Visual Core Description, ·Electrical Resistivity, ·P-wave Velocity for discrete sample. Data is requested **if measured**.	NA			NA
2	Naokazu Ahagon Takamitsu Sugihara	904NAQ	**Quality control Purpose** We do not request specific horizon, core section, or core lithology beforehand Need soft to consolidated sediment samples that are cored by several coring tools (HPCS, EPCS, ESCS and RCB) Specific samples will be requested after core is recovered. Samples will be taken after sampling for requests #3 and #4, even if these samplings are done onshore after the expedition	**Need information about storing condition.**	Approved on 29th Oct. But detailed request will be need after sampling for request No. 3 and 4 finish.		-
		NA	**Quality control Purpose** The requested measurement data: ·X-ray CT scanner, ·MSCL-W, ·Moisture and Density, ·Interstitial Water chemistry (e.g., refractive index (salinity), alkalinity, pHm, Cl content, major cations, minor to trace cations, and anions), ·Thermal Conductivity, ·Bulk Chemistry (major and trace elements), ·MSCL-I, ·MSCL-C, ·Visual Core Description, ·Electrical Resistivity, ·P-wave Velocity for discrete sample. Data is requested **if measured**.	NA			NA
3	Noriaki Masui	904NMA	Take sample **AFTER** CT scan Each Sample Amount: 10 cm WRC Sampling Interval: 1 per section (< 10 mbsf, Bottom of Section) 1 per core (> 10 mbsf, Bottom of Section 3) *Sections should be stored in the refrigerator before CT scan. *If coring with fluorescent beads is conducted, take WRC samples from all sections even if depth is over 10 mbsf.	~~Frozen. Scientists will arrange the use of Deep Freezers.~~ **4℃**	Approved on 29th Oct.	**Completed**	59
		904NMB	Take sample **BEFORE** CT scan 2 WRC samples are taken by the requester. 1 sample is ~~from section 6 (< 10 mbsf)~~ at the depth near 10 mbsf at Hole C 1 sample is from section ? (> 10 mbsf) at Hole D →This sample was not taken because the EPCS and ESCS core recovery was low. **→Take sample during Exp.905** ***If samples are not taken during Exp.904, take samples during Exp.905.**	~~Frozen. Scientists will arrange the use of Deep Freezers.~~ **4℃**		**Partially taken**	1

#	Requester	Sample Code	Requesting Materials	Storing condition	Status		The number of samples taken
4	Hiroshi Kitazato + MRC	904HKMC	Micropaleonotological personal samples: 10 cm stratigraphic intervals from the core top to the end of cores. 2 cubed samples (not 10 cc but 7 cc each) will be taken Expected numbers of cubes are 6000 (300m X 10 cm intervals X 2). If fossil contents are scarce, half round core sampling will be done for two cm thickness. The samples can not be taken from WRC sampling (904NM) intervals. It seems to be difficult to take 1 sample (2 cubed sample) from every 10 cm onboard. So sampling plan onboard was changed as below; **•Hole A and B** No sampling **•Hole C and D** Take 1 sample (2 cubed sample) / section at 30-32 cm of each section. ~~Not take samples from CC.~~ **Additional sampling at KCC will be conducted after coordination.**	Room temperature	Approved on 29th Oct.	**Partially taken**	74
		904HKMH	Micropaleonotological personal samples: 10 cm stratigraphic intervals from the core top to the end of cores. 2 cubed samples (not 10 cc but 7 cc each) will be taken Expected numbers of cubes are 6000 (300m X 10 cm intervals X 2). If fossil contents are scarce, half round core sampling will be done for two cm thickness. The samples can not be taken from WRC sampling (904NM) intervals. It seems to be difficult to take 1 samples from every 10 cm onboard. So sampling plan onboard was changed as below; **•Hole A and B** No sampling **•Hole C** Take half round core sample. 2 cm in thickness, 20 cc. 1 / 10 cm. No sample from CC. **•Hole D** Take half round core sample. 2 cm in thickness, 20 cc. At 60-62, 90-92, 120-122 cm of each section.	Room temperature		**Partially taken**	236
		904HKU	Plaeomagnetic samples: Sampling will be held at Kochi core center after finishing the training cruise. Samples will be taken from archive half with u-channel. The samples can not be taken from WRC sampling (904NM) intervals. Samples are taken from the sections of the Holes which are necessary for microfossils study. Quarter round of archive half should be kept.	**Need information about storing condition.**			-
		904HKCC	Core catcher samples: Core catcher samples will be used for on-board age determination with microfossils. ・Smear slides ・250 mesh washed samples All the processed samples will be brought back to own laboratory and continue to use for age asignments. This is personal sample request, not residue request. "PAL" sample will not be taken. From the bottom of CC. 5 cm long WRC sample, 175 cc.	Room temperature		**Completed**	42

Table 4-2-1: Sample list for each sample code including sampling position and its depth.

Exp.904 Sample Summary

	C9010A	C9010B	C9010C	C9010D	Total
HS	1	9	0	10	20
904HKCC	1	14	2	25	42
904NMA	3	18	9	29	59
904NMB	0	0	1	0	1
904HKMC	0	0	13	61	74
904HKMH	0	0	132	104	236
SS	2	23	0	4	29
					461

Exp.904 HS sample list

No.	Sample source	Sample code	Top Depth [m CSF-A]	Top Depth [m CSF-B]	Bottom Depth [m CSF-A]	Bottom Depth [m CSF-B]	Sample volume (cm3)	Sample entered by	Sample time-stamp	J-CORES sample ID
1	C9010A-1H-2 WR, 0.0—4.0 cm	HS	1.41	1.41	1.45	1.45	5	yasunagam	2009-11-08T16:50:24Z	CKY000000000000000150
2	C9010B-1H-2 WR, 0.0—4.0 cm	HS	1.43	1.43	1.47	1.47	5	yasunagam	2009-11-08T18:18:51Z	CKY000000000000000650
3	C9010B-2H-2 WR, 0.0—4.0 cm	HS	6.04	5.968	6.08	6.006	5	moriyas	2009-11-08T20:05:33Z	CKY000000000000001150
4	C9010B-3H-2 WR, 0.0—4.0 cm	HS	15.45	15.307	15.49	15.343	5	moriyas	2009-11-08T23:19:25Z	CKY000000000000001650
5	C9010B-4H-3 WR, 0.0—4.0 cm	HS	25.36	25.17	25.4	25.206	5	moriyas	2009-11-09T00:51:14Z	CKY000000000000002050
6	C9010B-5H-3 WR, 0.0—4.0 cm	HS	34.215	34.18	34.255	34.218	5	moriyas	2009-11-09T04:27:44Z	CKY000000000000002350
7	C9010B-6H-5 WR, 0.0—4.0 cm	HS	47.135	46.813	47.175	46.851	5	moriyas	2009-11-09T05:49:27Z	CKY000000000000002650
8	C9010B-7H-3 WR, 0.0—4.0 cm	HS	54.935	54.921	54.975	54.961	5	yasunagam	2009-11-09T07:10:37Z	CKY000000000000002850
9	C9010B-8X-2 WR, 0.0—4.0 cm	HS	61.74	61.74	61.78	61.78	5	yasunagam	2009-11-09T11:40:18Z	CKY000000000000003150
10	C9010B-9H-2 WR, 0.0—4.0 cm	HS	80.6	80.59	80.64	80.63	5	yasunagam	2009-11-09T14:03:53Z	CKY000000000000003450
11	C9010D-6X-1 WR, 137.0—141.0 cm	HS	63.85	63.85	63.89	63.89	5	moriyas	2009-11-15T01:35:10Z	CKY000000000000028250
12	C9010D-7X-2 WR, 0.0—4.0 cm	HS	73.36	73.36	73.4	73.4	5	moriyas	2009-11-15T03:33:02Z	CKY000000000000029950
13	C9010D-9X-2 WR, 0.0—4.0 cm	HS	92.26	92.26	92.3	92.3	5	yasunagam	2009-11-15T08:04:37Z	CKY000000000000032750
14	C9010D-12X-1 WR, 84.5—88.5 cm	HS	118.825	118.825	118.865	118.865	5	yasunagam	2009-11-15T15:04:24Z	CKY000000000000036750
15	C9010D-13X-2 WR, 0.0—4.0 cm	HS	128.44	128.44	128.48	128.48	5	yasunagam	2009-11-15T17:21:22Z	CKY000000000000037450
16	C9010D-14X-2 WR, 0.0—4.0 cm	HS	138.38	138.38	138.42	138.42	5	moriyas	2009-11-15T19:46:20Z	CKY000000000000037950
17	C9010D-15X-2 WR, 0.0—4.0 cm	HS	147.88	147.88	147.92	147.92	5	moriyas	2009-11-15T21:49:37Z	CKY000000000000038450
18	C9010D-16X-2 WR, 0.0—4.0 cm	HS	157.385	157.385	157.425	157.425	5	moriyas	2009-11-15T23:57:26Z	CKY000000000000039550
19	C9010D-21X-2 WR, 0.0—4.0 cm	HS	203.985	203.985	204.025	204.025	5	yasunagam	2009-11-16T12:15:11Z	CKY000000000000043350
20	C9010D-23X-2 WR, 0.0—4.0 cm	HS	218.19	218.19	218.23	218.23	5	yasunagam	2009-11-16T17:03:55Z	CKY000000000000043850

Exp.904 904HKCC sample list

No.	Sample source	Sample code	Top Depth [m CSF-A]	Top Depth [m CSF-B]	Bottom Depth [m CSF-A]	Bottom Depth [m CSF-B]	Sample volume (cm3)	Sample entered by	Sample time-stamp	J-CORES sample ID
1	C9010A-1H-CC WR, 31.5--36.5 cm	904HKCC	4.16	4.16	4.21	4.21	175	yasunagam	2009-11-08T16:50:56Z	CKY000000000000000250
2	C9010B-1H-CC WR, 25.0--30.0 cm	904HKCC	4.52	4.52	4.57	4.57	175	yasunagam	2009-11-08T18:28:58Z	CKY000000000000000750
3	C9010B-2H-CC WR, 13.0--18.0 cm	904HKCC	14.51	14.007	14.56	14.054	175	yasunagam	2009-11-08T20:08:31Z	CKY000000000000001250
4	C9010B-3H-CC WR, 47.0--52.0 cm	904HKCC	24.725	23.581	24.775	23.625	175	moriyas	2009-11-08T23:21:52Z	CKY000000000000001750
5	C9010B-4H-CC WR, 45.5--50.5 cm	904HKCC	34.25	33.085	34.3	33.13	175	moriyas	2009-11-09T00:50:40Z	CKY000000000000001950
6	C9010B-5H-CC WR, 16.5--21.5 cm	904HKCC	42.895	42.577	42.945	42.625	175	moriyas	2009-11-09T04:18:16Z	CKY000000000000002250
7	C9010B-6H-CC WR, 0.0--5.0 cm	904HKCC	52.81	52.084	52.86	52.13	175	moriyas	2009-11-09T05:48:50Z	CKY000000000000002550
8	C9010B-7H-CC WR, 22.5--27.5 cm	904HKCC	60.325	60.285	60.375	60.335	175	yasunagam	2009-11-09T07:15:32Z	CKY000000000000002950
9	C9010B-8X-CC WR, 25.0--30.0 cm	904HKCC	66.455	66.455	66.505	66.505	175	yasunagam	2009-11-09T11:42:26Z	CKY000000000000003250
10	C9010B-9H-CC WR, 21.0--26.0 cm	904HKCC	83.085	83.055	83.135	83.105	175	yasunagam	2009-11-09T14:04:27Z	CKY000000000000003550
11	C9010B-11X-CC WR, 11.0--16.0 cm	904HKCC	96.47	96.47	96.52	96.52	175	moriyas	2009-11-09T22:29:13Z	CKY000000000000003750
12	C9010B-12X-CC WR, 9.5--14.5 cm	904HKCC	102.215	102.215	102.265	102.265	175	moriyas	2009-11-10T00:49:57Z	CKY000000000000003950
13	C9010B-14X-CC WR, 10.0--15.0 cm	904HKCC	124.41	124.41	124.46	124.46	175	yasunagam	2009-11-10T06:20:16Z	CKY000000000000004150
14	C9010B-15X-CC WR, 0.0--5.0 cm	904HKCC	137.865	137.63	137.915	137.679	175	yasunagam	2009-11-10T10:03:57Z	CKY000000000000005150
15	C9010B-16X-CC WR, 9.5--14.5 cm	904HKCC	145.765	145.765	145.815	145.815	175	yasunagam	2009-11-10T12:19:11Z	CKY000000000000005550
16	C9010C-1H-CC WR, 21.0--26.0 cm	904HKCC	6.41	6.41	6.46	6.46	175	moriyas	2009-11-14T02:52:26Z	CKY000000000000007250
17	C9010C-2H-CC WR, 22.5--27.5 cm	904HKCC	16.915	15.939	16.965	15.984	175	moriyas	2009-11-14T04:50:26Z	CKY000000000000007950
18	C9010D-1H-CC WR, 35.5--40.5 cm	904HKCC	25.53	24.435	25.58	24.48	175	yasunagam	2009-11-14T16:17:39Z	CKY000000000000017750
19	C9010D-2H-CC WR, 41.0--46.0 cm	904HKCC	34.795	33.939	34.845	33.985	175	yasunagam	2009-11-14T18:06:58Z	CKY000000000000019750
20	C9010D-3H-CC WR, 10.5--15.5 cm	904HKCC	43.395	43.395	43.445	43.445	175	moriyas	2009-11-14T20:18:27Z	CKY000000000000023250
21	C9010D-5X-CC WR, 19.5--24.5 cm	904HKCC	53.405	53.405	53.455	53.455	175	moriyas	2009-11-14T23:41:01Z	CKY000000000000026550
22	C9010D-4H-CC WR, 14.5--19.5 cm	904HKCC	53.485	52.928	53.535	52.975	175	moriyas	2009-11-14T21:30:47Z	CKY000000000000023850
23	C9010D-6X-CC WR, 6.5--11.5 cm	904HKCC	65.265	65.265	65.315	65.315	175	moriyas	2009-11-15T01:36:26Z	CKY000000000000028350
24	C9010D-7X-CC WR, 21.0--26.0 cm	904HKCC	76.095	76.095	76.145	76.145	175	moriyas	2009-11-15T03:33:35Z	CKY000000000000030050
25	C9010D-9X-CC WR, 22.0--27.0 cm	904HKCC	95.62	95.62	95.67	95.67	175	yasunagam	2009-11-15T08:06:38Z	CKY000000000000032850
26	C9010D-10X-CC WR, 31.0--36.0 cm	904HKCC	99.41	99.41	99.46	99.46	175	yasunagam	2009-11-15T10:34:09Z	CKY000000000000034050
27	C9010D-12X-CC WR, 24.0--29.0 cm	904HKCC	119.105	119.105	119.155	119.155	175	yasunagam	2009-11-15T15:03:25Z	CKY000000000000036650
28	C9010D-13X-CC WR, 16.0--21.0 cm	904HKCC	129.175	129.175	129.225	129.225	175	yasunagam	2009-11-15T17:22:12Z	CKY000000000000037550
29	C9010D-14X-CC WR, 12.0--17.0 cm	904HKCC	139.535	139.535	139.585	139.585	175	moriyas	2009-11-15T19:45:48Z	CKY000000000000037850
30	C9010D-15X-CC WR, 33.5--38.5 cm	904HKCC	151.355	151.355	151.405	151.405	175	moriyas	2009-11-15T21:59:46Z	CKY000000000000038550
31	C9010D-16X-CC WR, 31.0--36.0 cm	904HKCC	161.1	161.1	161.15	161.15	175	moriyas	2009-11-15T23:56:57Z	CKY000000000000039450
32	C9010D-17X-CC WR, 0.0--5.0 cm	904HKCC	165.48	165.48	165.53	165.53	175	moriyas	2009-11-16T02:45:04Z	CKY000000000000039750
33	C9010D-18X-CC WR, 18.5--23.5 cm	904HKCC	175.375	175.375	175.425	175.425	175	moriyas	2009-11-16T05:25:34Z	CKY000000000000041150
34	C9010D-19X-CC WR, 5.5--10.5 cm	904HKCC	185.43	185.43	185.48	185.48	175	yasunagam	2009-11-16T08:17:06Z	CKY000000000000042650
35	C9010D-21X-CC WR, 26.0--31.0 cm	904HKCC	204.99	204.99	205.04	205.04	175	yasunagam	2009-11-16T12:14:54Z	CKY000000000000043250
36	C9010D-23X-CC WR, 40.5--45.5 cm	904HKCC	219.14	219.14	219.19	219.19	175	yasunagam	2009-11-16T17:11:35Z	CKY000000000000043950
37	C9010D-24X-CC WR, 8.5--13.5 cm	904HKCC	227.065	227.065	227.115	227.115	175	moriyas	2009-11-16T19:34:12Z	CKY000000000000044150
38	C9010D-25X-CC WR, 0.0--5.0 cm	904HKCC	236.48	236.48	236.53	236.53	175	moriyas	2009-11-16T21:50:27Z	CKY000000000000044450
39	C9010D-26X-CC WR, 0.0--5.0 cm	904HKCC	245.98	245.98	246.03	246.03	175	moriyas	2009-11-17T00:01:05Z	CKY000000000000044550
40	C9010D-27X-CC WR, 26.0--31.0 cm	904HKCC	256.95	256.95	257	257	175	moriyas	2009-11-17T02:43:46Z	CKY000000000000044650
41	C9010D-28X-CC WR, 25.0--30.0 cm	904HKCC	266.055	266.055	266.105	266.105	175	moriyas	2009-11-17T05:22:33Z	CKY000000000000044750
42	C9010D-30X-CC WR, 32.5--37.5 cm	904HKCC	284.305	284.305	284.355	284.355	175	yasunagam	2009-11-17T11:07:35Z	CKY000000000000045750

Exp.904 904NMA sample list

No.	Sample source	Sample code	Top Depth [m CSF-A]	Top Depth [m CSF-B]	Bottom Depth [m CSF-A]	Bottom Depth [m CSF-B]	Sample volume (cm3)	Sample entered by	Sample time-stamp	J-CORES sample ID
1	C9010A-1H-1 WR, 131.0--141.0 cm	904NMA	1.31	1.31	1.41	1.41	350	tomiyama904	2009-11-08T17:21:58Z	CKY0000000000000000350
2	C9010A-1H-2 WR, 130.5--140.5 cm	904NMA	2.715	2.715	2.815	2.815	350	tomiyama904	2009-11-08T17:30:39Z	CKY0000000000000000450
3	C9010A-1H-3 WR, 93.0--103.0 cm	904NMA	3.745	3.745	3.845	3.845	350	tomiyama904	2009-11-08T17:41:06Z	CKY0000000000000000550
4	C9010B-1H-1 WR, 133.0--143.0 cm	904NMA	1.33	1.33	1.43	1.43	350	tomiyama904	2009-11-08T18:50:44Z	CKY0000000000000000850
5	C9010B-1H-2 WR, 135.0--144.0 cm	904NMA	2.78	2.78	2.87	2.87	315	tomiyama904	2009-11-08T19:05:45Z	CKY0000000000000000950
6	C9010B-1H-3 WR, 130.0--140.0 cm	904NMA	4.17	4.17	4.27	4.27	350	tomiyama904	2009-11-08T19:12:51Z	CKY0000000000000001050
7	C9010B-2H-1 WR, 131.0--141.0 cm	904NMA	5.94	5.873	6.04	5.968	350	tomiyama904	2009-11-08T20:52:47Z	CKY0000000000000001350
8	C9010B-2H-2 WR, 130.5--140.5 cm	904NMA	7.345	7.207	7.445	7.302	350	tomiyama904	2009-11-08T21:08:03Z	CKY0000000000000001450
9	C9010B-2H-3 WR, 130.5--140.5 cm	904NMA	8.75	8.54	8.85	8.635	350	tomiyama904	2009-11-08T21:21:29Z	CKY0000000000000001550
10	C9010B-3H-3 WR, 126.0--136.0 cm	904NMA	18.025	17.604	18.125	17.694	350	tomiyama904	2009-11-09T00:11:08Z	CKY0000000000000001850
11	C9010B-4H-3 WR, 122.5--132.5 cm	904NMA	26.585	26.261	26.685	26.35	350	tomiyama904	2009-11-09T01:32:32Z	CKY0000000000000002150
12	C9010B-5H-3 WR, 87.5--97.5 cm	904NMA	35.09	35.026	35.19	35.123	350	tomiyama904	2009-11-09T05:02:02Z	CKY0000000000000002450
13	C9010B-6H-3 WR, 130.5--140.5 cm	904NMA	45.625	45.411	45.725	45.504	350	tomiyama904	2009-11-09T06:35:28Z	CKY0000000000000002750
14	C9010B-7H-3 WR, 131.0--141.0 cm	904NMA	56.245	56.225	56.345	56.325	350	tomiyama904	2009-11-09T07:57:36Z	CKY0000000000000003050
15	C9010B-8X-3 WR, 130.5--140.5 cm	904NMA	64.45	64.45	64.55	64.55	350	tomiyama904	2009-11-09T12:37:21Z	CKY0000000000000003350
16	C9010B-9H-3 WR, 0.0--10.0 cm	904NMA	82.005	81.984	82.105	82.083	350	tomiyama904	2009-11-09T14:37:14Z	CKY0000000000000003650
17	C9010B-11X-3 WR, 131.5--141.5 cm	904NMA	94.455	94.455	94.555	94.555	350	tomiyama904	2009-11-09T23:02:03Z	CKY0000000000000003850
18	C9010B-12X-1 WR, 114.0--124.0 cm	904NMA	100.97	100.97	101.07	101.07	350	tomiyama904	2009-11-10T01:20:57Z	CKY0000000000000004050
19	C9010B-14X-3 WR, 110.0--120.0 cm	904NMA	122.535	122.535	122.635	122.635	350	tomiyama904	2009-11-10T06:54:54Z	CKY0000000000000004250
20	C9010B-15X-3 WR, 95.5--105.5 cm	904NMA	131.76	131.676	131.86	131.773	350	tomiyama904	2009-11-10T10:54:49Z	CKY0000000000000005250
21	C9010B-16X-3 WR, 24.0--34.0 cm	904NMA	140.045	140.045	140.145	140.145	350	tomiyama904	2009-11-10T12:40:07Z	CKY0000000000000006450
22	C9010C-1H-1 WR, 130.5--140.5 cm	904NMA	1.305	1.305	1.405	1.405	350	moriyas	2009-11-14T03:31:51Z	CKY0000000000000007350
23	C9010C-1H-2 WR, 130.0--140.0 cm	904NMA	2.705	2.705	2.805	2.805	350	masui2exp904	2009-11-14T03:42:23Z	CKY0000000000000007450
24	C9010C-1H-3 WR, 131.0--141.0 cm	904NMA	4.115	4.115	4.215	4.215	350	masui2exp904	2009-11-14T03:51:41Z	CKY0000000000000007550
25	C9010C-1H-4 WR, 130.5--140.5 cm	904NMA	5.52	5.52	5.62	5.62	350	masui2exp904	2009-11-14T04:04:42Z	CKY0000000000000007650
26	C9010C-1H-5 WR, 48.0--58.0 cm	904NMA	6.1	6.1	6.2	6.2	350	masui2exp904	2009-11-14T04:18:50Z	CKY0000000000000007750
27	C9010C-2H-1 WR, 131.0--141.0 cm	904NMA	7.79	7.668	7.89	7.758	350	masui2exp904	2009-11-14T05:35:01Z	CKY0000000000000008050
28	C9010C-2H-2 WR, 135.0--145.0 cm	904NMA	9.24	8.982	9.34	9.073	350	masui2exp904	2009-11-14T05:44:52Z	CKY0000000000000008150
29	C9010C-2H-3 WR, 121.0--131.0 cm	904NMA	10.55	10.169	10.65	10.26	350	masui2exp904	2009-11-14T06:07:35Z	CKY0000000000000008250
30	C9010C-2H-3 WR, 131.0--141.0 cm	904NMB	10.65	10.26	10.75	10.351	350	moriyas	2009-11-14T04:47:16Z	CKY0000000000000007850
31	C9010D-1H-3 WR, 131.5--141.5 cm	904NMA	19.22	18.78	19.32	18.87	350	masui2exp904	2009-11-14T17:10:12Z	CKY0000000000000019650
32	C9010D-2H-3 WR, 130.5--140.5 cm	904NMA	27.5	27.249	27.6	27.341	350	masui2exp904	2009-11-14T18:41:58Z	CKY0000000000000020950
33	C9010D-3H-1 WR, 117.5--127.5 cm	904NMA	35.155	35.155	35.255	35.255	350	masui2exp904	2009-11-14T21:01:57Z	CKY0000000000000023450
34	C9010D-3H-2 WR, 80.5--90.5 cm	904NMA	36.06	36.06	36.16	36.16	350	masui2exp904	2009-11-14T21:09:11Z	CKY0000000000000023550
35	C9010D-3H-3 WR, 120.0--130.0 cm	904NMA	37.36	37.36	37.46	37.46	350	masui2exp904	2009-11-14T21:00:44Z	CKY0000000000000023350
36	C9010D-3H-4 WR, 130.5--140.5 cm	904NMA	38.765	38.765	38.865	38.865	350	masui2exp904	2009-11-14T21:16:29Z	CKY0000000000000023650
37	C9010D-3H-5 WR, 131.5--141.5 cm	904NMA	40.18	40.18	40.28	40.28	350	masui2exp904	2009-11-14T21:28:06Z	CKY0000000000000023750
38	C9010D-3H-6 WR, 117.0--127.0 cm	904NMA	41.45	41.45	41.55	41.55	350	masui2exp904	2009-11-14T21:37:43Z	CKY0000000000000023950
39	C9010D-3H-7 WR, 89.5--99.5 cm	904NMA	42.445	42.445	42.545	42.545	350	masui2exp904	2009-11-14T21:52:53Z	CKY0000000000000024050
40	C9010D-3H-8 WR, 64.5--74.5 cm	904NMA	43.19	43.19	43.29	43.29	350	masui2exp904	2009-11-14T22:00:32Z	CKY0000000000000024150
41	C9010D-4H-1 WR, 16.5--26.5 cm	904NMA	43.645	43.636	43.745	43.73	350	masui2exp904	2009-11-14T22:23:53Z	CKY0000000000000024350
42	C9010D-4H-2 WR, 125.5--135.5 cm	904NMA	45	44.915	45.1	45.01	350	masui2exp904	2009-11-14T22:33:05Z	CKY0000000000000024450
43	C9010D-4H-3 WR, 128.5--138.5 cm	904NMA	46.385	46.223	46.485	46.318	350	masui2exp904	2009-11-14T22:09:28Z	CKY0000000000000024250
44	C9010D-4H-4 WR, 130.0--140.0 cm	904NMA	47.785	47.545	47.885	47.64	350	masui2exp904	2009-11-14T22:40:07Z	CKY0000000000000024550
45	C9010D-4H-5 WR, 131.5--141.5 cm	904NMA	49.2	48.882	49.3	48.976	350	masui2exp904	2009-11-14T22:44:28Z	CKY0000000000000025050
46	C9010D-4H-6 WR, 100.0--110.0 cm	904NMA	50.3	49.92	50.4	50.015	350	masui2exp904	2009-11-14T22:53:13Z	CKY0000000000000025150
47	C9010D-4H-7 WR, 130.5--140.5 cm	904NMA	51.705	51.247	51.805	51.342	350	masui2exp904	2009-11-14T23:01:55Z	CKY0000000000000025250
48	C9010D-4H-8 WR, 70.5--80.5 cm	904NMA	52.51	52.007	52.61	52.102	350	masui2exp904	2009-11-14T23:07:47Z	CKY0000000000000026050
49	C9010D-4H-9 WR, 63.0--73.0 cm	904NMA	53.24	52.697	53.34	52.791	350	masui2exp904	2009-11-14T23:14:02Z	CKY0000000000000026150
50	C9010D-6X-2 WR, 0.0--10.0 cm	904NMA	63.89	63.89	63.99	63.99	350	masui2exp904	2009-11-15T02:10:11Z	CKY0000000000000029050
51	C9010D-7X-3 WR, 52.0--62.0 cm	904NMA	75.015	75.015	75.115	75.115	350	masui2exp904	2009-11-15T03:52:31Z	CKY0000000000000030450
52	C9010D-9X-3 WR, 0.0--10.0 cm	904NMA	93.275	93.275	93.375	93.375	350	masui2exp904	2009-11-15T08:35:34Z	CKY0000000000000033350
53	C9010D-13X-1 WR, 86.0--96.0 cm	904NMA	128.34	128.34	128.44	128.44	350	masui2exp904	2009-11-15T17:42:36Z	CKY0000000000000037650
54	C9010D-13X-2 WR, 47.5--57.5 cm	904NMA	128.915	128.915	129.015	129.015	350	masui2exp904	2009-11-15T17:49:13Z	CKY0000000000000037750
55	C9010D-14X-1 WR, 130.0--140.0 cm	904NMA	138.28	138.28	138.38	138.38	350	masui2exp904	2009-11-15T20:07:13Z	CKY0000000000000038350
56	C9010D-15X-3 WR, 91.0--101.0 cm	904NMA	150.195	150.195	150.295	150.295	350	masui2exp904	2009-11-15T22:17:44Z	CKY0000000000000038650
57	C9010D-16X-3 WR, 130.5--140.5 cm	904NMA	160.07	160.07	160.17	160.17	350	masui2exp904	2009-11-16T00:22:05Z	CKY0000000000000039650
58	C9010D-21X-1 WR, 40.5--50.5 cm	904NMA	203.885	203.885	203.985	203.985	350	masui2exp904	2009-11-16T12:32:33Z	CKY0000000000000043450
59	C9010D-23X-1 WR, 61.0--71.0 cm	904NMA	218.09	218.09	218.19	218.19	350	masui2exp904	2009-11-16T17:27:14Z	CKY0000000000000044050

Exp.904 904NMB sample list

No.	Sample source	Sample code	Top Depth [m CSF-A]	Top Depth [m CSF-B]	Bottom Depth [m CSF-A]	Bottom Depth [m CSF-B]	Sample volume (cm3)	Sample entered by	Sample time-stamp	J-CORES sample ID
1	C9010C-2H-3 WR, 131.0--141.0 cm	904NMB	10.65	10.26	10.75	10.351	350	moriyas	2009-11-14T04:47:16Z	CKY000000000000007850

Exp.904 904HKMC sample list

No.	Sample source	Sample code	Top Depth [m CSF-A]	Top Depth [m CSF-B]	Bottom Depth [m CSF-A]	Bottom Depth [m CSF-B]	Sample volume (cm3)	Sample entered by	Sample time-stamp	J-CORES sample ID
1	C9010C-1H-1 W, 30.0--32.0 cm	904HKMC	0.3	0.3	0.32	0.32	14	koyanagi904	2009-11-14T09:23:04Z	CKY0000000000000008350
2	C9010C-1H-2 W, 30.0--32.0 cm	904HKMC	1.705	1.705	1.725	1.725	14	koyanagi904	2009-11-14T10:20:01Z	CKY0000000000000008750
3	C9010C-1H-3 W, 30.0--32.0 cm	904HKMC	3.105	3.105	3.125	3.125	14	koyanagi904	2009-11-14T10:42:58Z	CKY0000000000000009150
4	C9010C-1H-4 W, 30.0--32.0 cm	904HKMC	4.515	4.515	4.535	4.535	14	koyanagi904	2009-11-14T11:21:47Z	CKY0000000000000009550
5	C9010C-1H-5 W, 30.0--32.0 cm	904HKMC	5.92	5.92	5.94	5.94	14	koyanagi904	2009-11-14T12:02:49Z	CKY0000000000000009950
6	C9010C-2H-1 W, 30.0--32.0 cm	904HKMC	6.78	6.752	6.8	6.77	14	mochizuki904	2009-11-14T13:52:17Z	CKY0000000000000014250
7	C9010C-2H-2 W, 20.0--22.0 cm	904HKMC	8.09	7.939	8.11	7.958	14	mochizuki904	2009-11-14T13:52:17Z	CKY0000000000000014350
8	C9010C-2H-3 W, 30.0--32.0 cm	904HKMC	9.64	9.344	9.66	9.363	14	mochizuki904	2009-11-14T13:52:17Z	CKY0000000000000014450
9	C9010C-2H-4 W, 30.0--32.0 cm	904HKMC	11.05	10.623	11.07	10.641	14	mochizuki904	2009-11-14T14:29:21Z	CKY0000000000000015450
10	C9010C-2H-5 W, 30.0--32.0 cm	904HKMC	12.525	11.96	12.545	11.978	14	mochizuki904	2009-11-14T14:42:20Z	CKY0000000000000015850
11	C9010C-2H-6 W, 70.0--72.0 cm	904HKMC	14.33	13.596	14.35	13.614	14	mochizuki904	2009-11-14T14:42:20Z	CKY0000000000000015950
12	C9010C-2H-7 W, 30.0--32.0 cm	904HKMC	15.36	14.53	15.38	14.548	14	mochizuki904	2009-11-14T14:42:20Z	CKY0000000000000016050
13	C9010C-2H-8 W, 30.0--32.0 cm	904HKMC	16.365	15.441	16.385	15.459	14	mochizuki904	2009-11-14T15:07:13Z	CKY0000000000000016650
14	C9010D-1H-1 W, 30.0--32.0 cm	904HKMC	15.28	15.249	15.3	15.267	14	mochizuki904	2009-11-14T22:40:23Z	CKY0000000000000024650
15	C9010D-1H-2 W, 31.0--33.0 cm	904HKMC	16.71	16.531	16.73	16.548	14	mochizuki904	2009-11-14T23:03:54Z	CKY0000000000000025350
16	C9010D-1H-3 W, 30.0--32.0 cm	904HKMC	18.205	17.87	18.225	17.888	14	mochizuki904	2009-11-14T23:03:54Z	CKY0000000000000025750
17	C9010D-1H-4 W, 33.0--35.0 cm	904HKMC	19.65	19.165	19.67	19.183	14	mochizuki904	2009-11-14T23:31:52Z	CKY0000000000000026250
18	C9010D-1H-5 W, 30.0--32.0 cm	904HKMC	21.105	20.469	21.125	20.487	14	mochizuki904	2009-11-14T23:42:56Z	CKY0000000000000026650
19	C9010D-1H-6 W, 30.0--32.0 cm	904HKMC	22.545	21.76	22.565	21.778	14	mochizuki904	2009-11-14T23:57:00Z	CKY0000000000000027050
20	C9010D-1H-7 W, 30.0--32.0 cm	904HKMC	23.755	22.844	23.775	22.862	14	mochizuki904	2009-11-15T00:16:25Z	CKY0000000000000027350
21	C9010D-2H-1 W, 24.0--26.0 cm	904HKMC	24.72	24.7	24.74	24.718	14	koyanagi904	2009-11-15T01:04:25Z	CKY0000000000000027850
22	C9010D-1H-8 W, 28.0--30.0 cm	904HKMC	24.74	23.727	24.76	23.745	14	mochizuki904	2009-11-15T00:33:39Z	CKY0000000000000027650
23	C9010D-2H-2 W, 30.0--32.0 cm	904HKMC	25.09	25.039	25.11	25.058	14	koyanagi904	2009-11-15T01:18:14Z	CKY0000000000000027950
24	C9010D-2H-3 W, 30.0--32.0 cm	904HKMC	26.495	26.328	26.515	26.346	14	koyanagi904	2009-11-15T01:45:11Z	CKY0000000000000028450
25	C9010D-2H-4 W, 30.0--32.0 cm	904HKMC	27.9	27.616	27.92	27.634	14	koyanagi904	2009-11-15T01:50:06Z	CKY0000000000000028850
26	C9010D-2H-6 W, 30.0--32.0 cm	904HKMC	30.25	29.771	30.27	29.789	14	koyanagi904	2009-11-15T02:39:45Z	CKY0000000000000029150
27	C9010D-2H-7 W, 30.0--32.0 cm	904HKMC	31.655	31.059	31.675	31.078	14	koyanagi904	2009-11-15T03:13:55Z	CKY0000000000000029550
28	C9010D-2H-8 W, 30.0--32.0 cm	904HKMC	33.06	32.348	33.08	32.366	14	koyanagi904	2009-11-15T03:41:35Z	CKY0000000000000030150
29	C9010D-2H-9 W, 30.0--32.0 cm	904HKMC	34.06	33.265	34.08	33.283	14	koyanagi904	2009-11-15T04:00:01Z	CKY0000000000000030550
30	C9010D-3H-1 W, 32.0--34.0 cm	904HKMC	34.3	34.3	34.32	34.32	14	koyanagi904	2009-11-15T04:29:35Z	CKY0000000000000030750
31	C9010D-3H-2 W, 12.0--14.0 cm	904HKMC	35.375	35.375	35.395	35.395	14	koyanagi904	2009-11-15T04:55:53Z	CKY0000000000000031050
32	C9010D-3H-5 W, 30.0--32.0 cm	904HKMC	39.165	39.165	39.185	39.185	14	koyanagi904	2009-11-15T05:12:03Z	CKY0000000000000031150
33	C9010D-3H-6 W, 29.0--31.0 cm	904HKMC	40.57	40.57	40.59	40.59	14	koyanagi904	2009-11-15T05:40:27Z	CKY0000000000000031550
34	C9010D-4H-1 W, 2.0--4.0 cm	904HKMC	43.5	43.499	43.52	43.518	14	koyanagi904	2009-11-15T07:01:15Z	CKY0000000000000031850
35	C9010D-4H-2 W, 37.0--39.0 cm	904HKMC	44.115	44.08	44.135	44.098	14	koyanagi904	2009-11-15T07:16:23Z	CKY0000000000000031950
36	C9010D-4H-3 W, 30.0--32.0 cm	904HKMC	45.4	45.293	45.42	45.312	14	koyanagi904	2009-11-15T07:46:55Z	CKY0000000000000032350
37	C9010D-4H-4 W, 30.0--32.0 cm	904HKMC	46.785	46.601	46.805	46.62	14	koyanagi904	2009-11-15T08:24:28Z	CKY0000000000000032950
38	C9010D-4H-5 W, 30.0--32.0 cm	904HKMC	48.185	47.923	48.205	47.942	14	koyanagi904	2009-11-15T08:53:48Z	CKY0000000000000033450
39	C9010D-4H-6 W, 28.0--30.0 cm	904HKMC	49.58	49.24	49.6	49.259	14	koyanagi904	2009-11-15T09:27:12Z	CKY0000000000000033850
40	C9010D-6X-1 W, 30.0--32.0 cm	904HKMC	62.78	62.78	62.8	62.8	14	koyanagi904	2009-11-15T11:26:39Z	CKY0000000000000034150
41	C9010D-6X-2 W, 30.0--32.0 cm	904HKMC	64.19	64.19	64.21	64.21	14	mochizuki904	2009-11-15T12:13:36Z	CKY0000000000000034550
42	C9010D-7X-1 W, 30.0--32.0 cm	904HKMC	72.28	72.28	72.3	72.3	14	mochizuki904	2009-11-15T12:41:46Z	CKY0000000000000034950
43	C9010D-7X-2 W, 30.0--32.0 cm	904HKMC	73.66	73.66	73.68	73.68	14	mochizuki904	2009-11-15T12:41:46Z	CKY0000000000000035250
44	C9010D-7X-3 W, 20.0--22.0 cm	904HKMC	74.695	74.695	74.715	74.715	14	mochizuki904	2009-11-15T13:03:49Z	CKY0000000000000035550
45	C9010D-7X-4 W, 30.0--32.0 cm	904HKMC	75.415	75.415	75.435	75.435	14	mochizuki904	2009-11-15T13:03:49Z	CKY0000000000000035650
46	C9010D-9X-1 W, 20.0--22.0 cm	904HKMC	91.18	91.18	91.2	91.2	14	mochizuki904	2009-11-15T14:45:49Z	CKY0000000000000035850
47	C9010D-9X-2 W, 30.0--32.0 cm	904HKMC	92.56	92.56	92.58	92.58	14	mochizuki904	2009-11-15T14:56:50Z	CKY0000000000000036250
48	C9010D-9X-3 W, 30.0--32.0 cm	904HKMC	93.575	93.575	93.595	93.595	14	mochizuki904	2009-11-15T14:58:43Z	CKY0000000000000036450
49	C9010D-9X-4 W, 30.0--32.0 cm	904HKMC	94.435	94.435	94.455	94.455	14	mochizuki904	2009-11-15T15:17:25Z	CKY0000000000000036850
50	C9010D-12X-1 W, 30.0--32.0 cm	904HKMC	118.28	118.28	118.3	118.3	14	mochizuki904	2009-11-15T16:31:51Z	CKY0000000000000037250
51	C9010D-13X-1 W, 30.0--32.0 cm	904HKMC	127.78	127.78	127.8	127.8	14	mochizuki904	2009-11-15T20:00:07Z	CKY0000000000000038050
52	C9010D-13X-2 W, 28.0--30.0 cm	904HKMC	128.72	128.72	128.74	128.74	14	mochizuki904	2009-11-15T20:00:07Z	CKY0000000000000038150
53	C9010D-14X-1 W, 50.0--52.0 cm	904HKMC	137.48	137.48	137.5	137.5	14	mochizuki904	2009-11-15T23:05:52Z	CKY0000000000000039350
54	C9010D-14X-2 W, 30.0--32.0 cm	904HKMC	138.68	138.68	138.7	138.7	14	mochizuki904	2009-11-15T22:54:37Z	CKY0000000000000038750
55	C9010D-15X-1 W, 31.0--33.0 cm	904HKMC	146.79	146.79	146.81	146.81	14	koyanagi904	2009-11-16T03:46:10Z	CKY0000000000000039850
56	C9010D-15X-2 W, 30.0--32.0 cm	904HKMC	148.18	148.18	148.2	148.2	14	koyanagi904	2009-11-16T04:14:55Z	CKY0000000000000040250
57	C9010D-15X-3 W, 30.0--32.0 cm	904HKMC	149.585	149.585	149.605	149.605	14	koyanagi904	2009-11-16T04:46:34Z	CKY0000000000000040650
58	C9010D-15X-4 W, 30.0--32.0 cm	904HKMC	150.595	150.595	150.615	150.615	14	koyanagi904	2009-11-16T05:18:32Z	CKY0000000000000040950
59	C9010D-16X-1 W, 32.0--34.0 cm	904HKMC	156.3	156.3	156.32	156.32	14	koyanagi904	2009-11-16T06:42:08Z	CKY0000000000000041250
60	C9010D-16X-2 W, 20.0--22.0 cm	904HKMC	157.585	157.585	157.605	157.605	14	koyanagi904	2009-11-16T07:13:17Z	CKY0000000000000041650
61	C9010D-16X-3 W, 30.0--32.0 cm	904HKMC	159.065	159.065	159.085	159.085	14	koyanagi904	2009-11-16T07:44:01Z	CKY0000000000000042050
62	C9010D-16X-4 W, 30.0--32.0 cm	904HKMC	160.47	160.47	160.49	160.49	14	koyanagi904	2009-11-16T08:15:52Z	CKY0000000000000042450
63	C9010D-18X-1 W, 4.0--6.0 cm	904HKMC	175.02	175.02	175.04	175.04	14	koyanagi904	2009-11-16T08:57:26Z	CKY0000000000000042750
64	C9010D-19X-1 W, 26.0--28.0 cm	904HKMC	184.74	184.74	184.76	184.76	14	koyanagi904	2009-11-16T11:44:39Z	CKY0000000000000043050
65	C9010D-21X-1 W, 30.0--32.0 cm	904HKMC	203.78	203.78	203.8	203.8	14	mochizuki904	2009-11-16T14:45:11Z	CKY0000000000000043550
66	C9010D-21X-2 W, 30.0--32.0 cm	904HKMC	204.285	204.285	204.305	204.305	14	mochizuki904	2009-11-16T14:55:46Z	CKY0000000000000043650
67	C9010D-23X-1 W, 35.0--37.0 cm	904HKMC	217.83	217.83	217.85	217.85	14	mochizuki904	2009-11-16T20:05:25Z	CKY0000000000000044250
68	C9010D-23X-2 W, 30.0--32.0 cm	904HKMC	218.49	218.49	218.51	218.51	14	mochizuki904	2009-11-16T20:15:49Z	CKY0000000000000044350
69	C9010D-27X-1 W, 21.0--23.0 cm	904HKMC	255.69	255.69	255.71	255.71	14	koyanagi904	2009-11-17T06:28:54Z	CKY0000000000000044850

70 C9010D-27X-2 W, 30.0—32.0 cm	904HKMC	256.45	256.45	256.47	256.47	14 koyanagi904	2009-11-17T06:47:15Z	CKY0000000000000045050
71 C9010D-27X-CC W, 5.0—7.0 cm	904HKMC	256.74	256.74	256.76	256.76	14 koyanagi904	2009-11-17T07:08:48Z	CKY0000000000000045250
72 C9010D-28X-1 W, 32.0—34.0 cm	904HKMC	265.3	265.3	265.32	265.32	14 koyanagi904	2009-11-17T08:43:39Z	CKY0000000000000045450
73 C9010D-28X-CC W, 11.0—13.0 cm	904HKMC	265.915	265.915	265.935	265.935	14 koyanagi904	2009-11-17T09:06:57Z	CKY0000000000000045650
74 C9010D-30X-CC W, 20.0—22.0 cm	904HKMC	284.18	284.18	284.2	284.2	14 mochizuki904	2009-11-17T12:17:39Z	CKY0000000000000045850

Exp.904 904HKMH sample list

No.	Sample source	Sample code	Top Depth [m CSF-A]	Top Depth [m CSF-B]	Bottom Depth [m CSF-A]	Bottom Depth [m CSF-B]	Sample volume (cm3)	Sample entered by	Sample time-stamp	J-CORES sample ID
1	C9010C-1H-1 W, 0.0--2.0 cm	904HKMH	0	0	0.02	0.02	20	mochizuki904	2009-11-14T12:52:36Z	CKY000000000000012750
2	C9010C-1H-1 W, 10.0--12.0 cm	904HKMH	0.1	0.1	0.12	0.12	20	mochizuki904	2009-11-14T12:16:44Z	CKY000000000000010050
3	C9010C-1H-1 W, 20.0--22.0 cm	904HKMH	0.2	0.2	0.22	0.22	20	mochizuki904	2009-11-14T12:16:44Z	CKY000000000000010150
4	C9010C-1H-1 W, 40.0--42.0 cm	904HKMH	0.4	0.4	0.42	0.42	20	mochizuki904	2009-11-14T12:16:44Z	CKY000000000000010250
5	C9010C-1H-1 W, 50.0--52.0 cm	904HKMH	0.5	0.5	0.52	0.52	20	mochizuki904	2009-11-14T12:16:44Z	CKY000000000000010350
6	C9010C-1H-1 W, 60.0--62.0 cm	904HKMH	0.6	0.6	0.62	0.62	20	koyanagi904	2009-11-14T09:23:04Z	CKY000000000000008450
7	C9010C-1H-1 W, 70.0--72.0 cm	904HKMH	0.7	0.7	0.72	0.72	20	mochizuki904	2009-11-14T12:16:44Z	CKY000000000000010450
8	C9010C-1H-1 W, 80.0--82.0 cm	904HKMH	0.8	0.8	0.82	0.82	20	mochizuki904	2009-11-14T12:16:44Z	CKY000000000000010550
9	C9010C-1H-1 W, 90.0--92.0 cm	904HKMH	0.9	0.9	0.92	0.92	20	koyanagi904	2009-11-14T09:23:04Z	CKY000000000000008550
10	C9010C-1H-1 W, 100.0--102.0 cm	904HKMH	1	1	1.02	1.02	20	mochizuki904	2009-11-14T12:16:44Z	CKY000000000000010650
11	C9010C-1H-1 W, 120.0--122.0 cm	904HKMH	1.2	1.2	1.22	1.22	20	koyanagi904	2009-11-14T09:23:04Z	CKY000000000000008650
12	C9010C-1H-1 W, 129.0--131.0 cm	904HKMH	1.29	1.29	1.31	1.31	20	mochizuki904	2009-11-14T12:16:45Z	CKY000000000000010750
13	C9010C-1H-2 W, 10.0--12.0 cm	904HKMH	1.505	1.505	1.525	1.525	20	mochizuki904	2009-11-14T12:35:50Z	CKY000000000000010850
14	C9010C-1H-2 W, 20.0--22.0 cm	904HKMH	1.605	1.605	1.625	1.625	20	mochizuki904	2009-11-14T12:35:50Z	CKY000000000000010950
15	C9010C-1H-2 W, 40.0--42.0 cm	904HKMH	1.805	1.805	1.825	1.825	20	mochizuki904	2009-11-14T12:35:50Z	CKY000000000000011050
16	C9010C-1H-2 W, 50.0--52.0 cm	904HKMH	1.905	1.905	1.925	1.925	20	mochizuki904	2009-11-14T12:35:50Z	CKY000000000000011150
17	C9010C-1H-2 W, 62.0--64.0 cm	904HKMH	2.025	2.025	2.045	2.045	20	koyanagi904	2009-11-14T10:20:01Z	CKY000000000000008850
18	C9010C-1H-2 W, 70.0--72.0 cm	904HKMH	2.105	2.105	2.125	2.125	20	mochizuki904	2009-11-14T12:35:50Z	CKY000000000000011250
19	C9010C-1H-2 W, 80.0--82.0 cm	904HKMH	2.205	2.205	2.225	2.225	20	mochizuki904	2009-11-14T12:35:50Z	CKY000000000000011350
20	C9010C-1H-2 W, 90.0--92.0 cm	904HKMH	2.305	2.305	2.325	2.325	20	koyanagi904	2009-11-14T10:20:01Z	CKY000000000000008950
21	C9010C-1H-2 W, 100.0--102.0 cm	904HKMH	2.405	2.405	2.425	2.425	20	mochizuki904	2009-11-14T12:35:50Z	CKY000000000000011450
22	C9010C-1H-2 W, 110.0--112.0 cm	904HKMH	2.505	2.505	2.525	2.525	20	mochizuki904	2009-11-14T12:46:36Z	CKY000000000000011650
23	C9010C-1H-2 W, 120.0--122.0 cm	904HKMH	2.605	2.605	2.625	2.625	20	koyanagi904	2009-11-14T10:20:01Z	CKY000000000000009050
24	C9010C-1H-2 W, 128.0--130.0 cm	904HKMH	2.685	2.685	2.705	2.705	20	mochizuki904	2009-11-14T12:35:50Z	CKY000000000000011550
25	C9010C-1H-3 W, 0.0--2.0 cm	904HKMH	2.805	2.805	2.825	2.825	20	mochizuki904	2009-11-14T12:51:15Z	CKY000000000000012050
26	C9010C-1H-3 W, 10.0--12.0 cm	904HKMH	2.905	2.905	2.925	2.925	20	mochizuki904	2009-11-14T12:51:15Z	CKY000000000000011750
27	C9010C-1H-3 W, 20.0--22.0 cm	904HKMH	3.005	3.005	3.025	3.025	20	mochizuki904	2009-11-14T12:51:15Z	CKY000000000000011850
28	C9010C-1H-3 W, 40.0--42.0 cm	904HKMH	3.205	3.205	3.225	3.225	20	mochizuki904	2009-11-14T12:51:15Z	CKY000000000000011950
29	C9010C-1H-3 W, 50.0--52.0 cm	904HKMH	3.305	3.305	3.325	3.325	20	mochizuki904	2009-11-14T12:51:15Z	CKY000000000000012150
30	C9010C-1H-3 W, 60.0--62.0 cm	904HKMH	3.405	3.405	3.425	3.425	20	koyanagi904	2009-11-14T10:42:58Z	CKY000000000000009250
31	C9010C-1H-3 W, 70.0--72.0 cm	904HKMH	3.505	3.505	3.525	3.525	20	mochizuki904	2009-11-14T12:51:15Z	CKY000000000000012250
32	C9010C-1H-3 W, 80.0--82.0 cm	904HKMH	3.605	3.605	3.625	3.625	20	mochizuki904	2009-11-14T12:51:15Z	CKY000000000000012350
33	C9010C-1H-3 W, 90.0--92.0 cm	904HKMH	3.705	3.705	3.725	3.725	20	koyanagi904	2009-11-14T10:42:58Z	CKY000000000000009350
34	C9010C-1H-3 W, 100.0--102.0 cm	904HKMH	3.805	3.805	3.825	3.825	20	mochizuki904	2009-11-14T12:51:15Z	CKY000000000000012450
35	C9010C-1H-3 W, 110.0--112.0 cm	904HKMH	3.905	3.905	3.925	3.925	20	mochizuki904	2009-11-14T12:51:15Z	CKY000000000000012550
36	C9010C-1H-3 W, 120.0--122.0 cm	904HKMH	4.005	4.005	4.025	4.025	20	koyanagi904	2009-11-14T10:42:58Z	CKY000000000000009450
37	C9010C-1H-3 W, 129.0--131.0 cm	904HKMH	4.095	4.095	4.115	4.115	20	mochizuki904	2009-11-14T12:51:15Z	CKY000000000000012650
38	C9010C-1H-4 W, 0.0--2.0 cm	904HKMH	4.215	4.215	4.235	4.235	20	mochizuki904	2009-11-14T13:15:08Z	CKY000000000000012850
39	C9010C-1H-4 W, 10.0--12.0 cm	904HKMH	4.315	4.315	4.335	4.335	20	mochizuki904	2009-11-14T13:15:08Z	CKY000000000000012950
40	C9010C-1H-4 W, 20.0--22.0 cm	904HKMH	4.415	4.415	4.435	4.435	20	mochizuki904	2009-11-14T13:15:08Z	CKY000000000000013050
41	C9010C-1H-4 W, 40.0--42.0 cm	904HKMH	4.615	4.615	4.635	4.635	20	mochizuki904	2009-11-14T13:15:08Z	CKY000000000000013150
42	C9010C-1H-4 W, 50.0--52.0 cm	904HKMH	4.715	4.715	4.735	4.735	20	mochizuki904	2009-11-14T13:15:08Z	CKY000000000000013250
43	C9010C-1H-4 W, 60.0--62.0 cm	904HKMH	4.815	4.815	4.835	4.835	20	koyanagi904	2009-11-14T11:21:47Z	CKY000000000000009650
44	C9010C-1H-4 W, 70.0--72.0 cm	904HKMH	4.915	4.915	4.935	4.935	20	mochizuki904	2009-11-14T13:15:08Z	CKY000000000000013350
45	C9010C-1H-4 W, 80.0--82.0 cm	904HKMH	5.015	5.015	5.035	5.035	20	mochizuki904	2009-11-14T13:15:08Z	CKY000000000000013450
46	C9010C-1H-4 W, 90.0--92.0 cm	904HKMH	5.115	5.115	5.135	5.135	20	koyanagi904	2009-11-14T11:21:47Z	CKY000000000000009750
47	C9010C-1H-4 W, 100.0--102.0 cm	904HKMH	5.215	5.215	5.235	5.235	20	mochizuki904	2009-11-14T13:15:08Z	CKY000000000000013550
48	C9010C-1H-4 W, 110.0--112.0 cm	904HKMH	5.315	5.315	5.335	5.335	20	mochizuki904	2009-11-14T13:15:08Z	CKY000000000000013650
49	C9010C-1H-4 W, 120.0--122.0 cm	904HKMH	5.415	5.415	5.435	5.435	20	koyanagi904	2009-11-14T11:21:47Z	CKY000000000000009850
50	C9010C-1H-4 W, 128.0--130.0 cm	904HKMH	5.495	5.495	5.515	5.515	20	mochizuki904	2009-11-14T13:15:08Z	CKY000000000000013750
51	C9010C-1H-5 W, 0.0--2.0 cm	904HKMH	5.62	5.62	5.64	5.64	20	mochizuki904	2009-11-14T13:33:03Z	CKY000000000000013850
52	C9010C-1H-5 W, 10.0--12.0 cm	904HKMH	5.72	5.72	5.74	5.74	20	mochizuki904	2009-11-14T13:33:03Z	CKY000000000000013950
53	C9010C-1H-5 W, 21.0--23.0 cm	904HKMH	5.83	5.83	5.85	5.85	20	mochizuki904	2009-11-14T13:33:03Z	CKY000000000000014050
54	C9010C-1H-5 W, 40.0--42.0 cm	904HKMH	6.02	6.02	6.04	6.04	20	mochizuki904	2009-11-14T13:33:03Z	CKY000000000000014150
55	C9010C-2H-1 W, 0.0--2.0 cm	904HKMH	6.48	6.48	6.5	6.498	20	mochizuki904	2009-11-14T16:05:28Z	CKY000000000000016750
56	C9010C-2H-1 W, 10.0--12.0 cm	904HKMH	6.58	6.571	6.6	6.589	20	mochizuki904	2009-11-14T16:05:28Z	CKY000000000000016850
57	C9010C-2H-1 W, 20.0--22.0 cm	904HKMH	6.68	6.661	6.7	6.679	20	mochizuki904	2009-11-14T16:05:28Z	CKY000000000000016950
58	C9010C-2H-1 W, 40.0--42.0 cm	904HKMH	6.88	6.843	6.9	6.861	20	mochizuki904	2009-11-14T16:05:28Z	CKY000000000000017050
59	C9010C-2H-1 W, 50.0--52.0 cm	904HKMH	6.98	6.933	7	6.951	20	mochizuki904	2009-11-14T16:05:28Z	CKY000000000000017150
60	C9010C-2H-1 W, 60.0--62.0 cm	904HKMH	7.08	7.024	7.1	7.042	20	mochizuki904	2009-11-14T14:04:13Z	CKY000000000000014550
61	C9010C-2H-1 W, 70.0--72.0 cm	904HKMH	7.18	7.115	7.2	7.133	20	mochizuki904	2009-11-14T16:05:28Z	CKY000000000000017250
62	C9010C-2H-1 W, 81.0--83.0 cm	904HKMH	7.29	7.214	7.31	7.232	20	mochizuki904	2009-11-14T16:05:28Z	CKY000000000000017350
63	C9010C-2H-1 W, 90.0--92.0 cm	904HKMH	7.38	7.296	7.4	7.314	20	mochizuki904	2009-11-14T14:04:13Z	CKY000000000000014650
64	C9010C-2H-1 W, 100.0--102.0 cm	904HKMH	7.48	7.386	7.5	7.405	20	mochizuki904	2009-11-14T16:05:28Z	CKY000000000000017450
65	C9010C-2H-1 W, 110.0--112.0 cm	904HKMH	7.58	7.477	7.6	7.495	20	mochizuki904	2009-11-14T16:05:28Z	CKY000000000000017550
66	C9010C-2H-1 W, 120.0--122.0 cm	904HKMH	7.68	7.568	7.7	7.586	20	mochizuki904	2009-11-14T14:04:13Z	CKY000000000000014750
67	C9010C-2H-1 W, 129.0--131.0 cm	904HKMH	7.77	7.649	7.79	7.668	20	mochizuki904	2009-11-14T16:05:28Z	CKY000000000000017650
68	C9010C-2H-2 W, 0.0--2.0 cm	904HKMH	7.89	7.758	7.91	7.776	20	mochizuki904	2009-11-14T16:36:01Z	CKY000000000000017850
69	C9010C-2H-2 W, 10.0--12.0 cm	904HKMH	7.99	7.849	8.01	7.867	20	mochizuki904	2009-11-14T16:36:01Z	CKY000000000000017950

70	C9010C-2H-2 W, 40.0–-42.0 cm	904HKMH	8.29	8.121	8.31	8.139	20	mochizuki904	2009-11-14T16:36:02Z	CKY000000000000018050
71	C9010C-2H-2 W, 50.0–-52.0 cm	904HKMH	8.39	8.211	8.41	8.229	20	mochizuki904	2009-11-14T16:36:02Z	CKY000000000000018150
72	C9010C-2H-2 W, 60.0–-62.0 cm	904HKMH	8.49	8.302	8.51	8.32	20	mochizuki904	2009-11-14T14:06:06Z	CKY000000000000014850
73	C9010C-2H-2 W, 70.0–-72.0 cm	904HKMH	8.59	8.393	8.61	8.411	20	mochizuki904	2009-11-14T16:36:02Z	CKY000000000000018250
74	C9010C-2H-2 W, 80.0–-82.0 cm	904HKMH	8.69	8.483	8.71	8.502	20	mochizuki904	2009-11-14T16:36:02Z	CKY000000000000018350
75	C9010C-2H-2 W, 90.0–-92.0 cm	904HKMH	8.79	8.574	8.81	8.592	20	mochizuki904	2009-11-14T14:06:06Z	CKY000000000000014950
76	C9010C-2H-2 W, 100.0–-102.0 cm	904HKMH	8.89	8.665	8.91	8.683	20	mochizuki904	2009-11-14T16:36:02Z	CKY000000000000018450
77	C9010C-2H-2 W, 110.0–-112.0 cm	904HKMH	8.99	8.755	9.01	8.773	20	mochizuki904	2009-11-14T16:36:02Z	CKY000000000000018550
78	C9010C-2H-2 W, 120.0–-122.0 cm	904HKMH	9.09	8.846	9.11	8.864	20	mochizuki904	2009-11-14T14:06:06Z	CKY000000000000015050
79	C9010C-2H-2 W, 130.0–-132.0 cm	904HKMH	9.19	8.937	9.21	8.955	20	mochizuki904	2009-11-14T16:36:02Z	CKY000000000000018650
80	C9010C-2H-3 W, 0.0–-2.0 cm	904HKMH	9.34	9.073	9.36	9.091	20	mochizuki904	2009-11-14T16:58:40Z	CKY000000000000018750
81	C9010C-2H-3 W, 10.0–-12.0 cm	904HKMH	9.44	9.163	9.46	9.181	20	mochizuki904	2009-11-14T16:58:40Z	CKY000000000000018850
82	C9010C-2H-3 W, 20.0–-22.0 cm	904HKMH	9.54	9.254	9.56	9.272	20	mochizuki904	2009-11-14T16:58:40Z	CKY000000000000018950
83	C9010C-2H-3 W, 40.0–-42.0 cm	904HKMH	9.74	9.435	9.76	9.453	20	mochizuki904	2009-11-14T16:58:40Z	CKY000000000000019050
84	C9010C-2H-3 W, 50.0–-52.0 cm	904HKMH	9.84	9.526	9.86	9.544	20	mochizuki904	2009-11-14T16:58:40Z	CKY000000000000019150
85	C9010C-2H-3 W, 60.0–-62.0 cm	904HKMH	9.94	9.616	9.96	9.635	20	mochizuki904	2009-11-14T14:07:55Z	CKY000000000000015150
86	C9010C-2H-3 W, 70.0–-72.0 cm	904HKMH	10.04	9.707	10.06	9.725	20	mochizuki904	2009-11-14T16:58:40Z	CKY000000000000019250
87	C9010C-2H-3 W, 80.0–-82.0 cm	904HKMH	10.14	9.798	10.16	9.816	20	mochizuki904	2009-11-14T16:58:40Z	CKY000000000000019350
88	C9010C-2H-3 W, 90.0–-92.0 cm	904HKMH	10.24	9.888	10.26	9.906	20	mochizuki904	2009-11-14T14:07:55Z	CKY000000000000015250
89	C9010C-2H-3 W, 100.0–-102.0 cm	904HKMH	10.34	9.979	10.36	9.997	20	mochizuki904	2009-11-14T16:58:40Z	CKY000000000000019450
90	C9010C-2H-3 W, 110.0–-112.0 cm	904HKMH	10.44	10.07	10.46	10.088	20	mochizuki904	2009-11-14T16:58:40Z	CKY000000000000019550
91	C9010C-2H-3 W, 119.0–-121.0 cm	904HKMH	10.53	10.151	10.55	10.169	20	mochizuki904	2009-11-14T14:07:55Z	CKY000000000000015350
92	C9010C-2H-4 W, 0.0–-2.0 cm	904HKMH	10.75	10.351	10.77	10.369	20	mochizuki904	2009-11-14T18:31:07Z	CKY000000000000019850
93	C9010C-2H-4 W, 10.0–-12.0 cm	904HKMH	10.85	10.441	10.87	10.46	20	mochizuki904	2009-11-14T18:31:07Z	CKY000000000000019950
94	C9010C-2H-4 W, 20.0–-22.0 cm	904HKMH	10.95	10.532	10.97	10.55	20	mochizuki904	2009-11-14T18:31:07Z	CKY000000000000020050
95	C9010C-2H-4 W, 40.0–-42.0 cm	904HKMH	11.15	10.713	11.17	10.731	20	mochizuki904	2009-11-14T18:31:07Z	CKY000000000000020150
96	C9010C-2H-4 W, 50.0–-52.0 cm	904HKMH	11.25	10.804	11.27	10.822	20	mochizuki904	2009-11-14T18:31:07Z	CKY000000000000020250
97	C9010C-2H-4 W, 60.0–-62.0 cm	904HKMH	11.35	10.895	11.37	10.913	20	mochizuki904	2009-11-14T14:29:21Z	CKY000000000000015550
98	C9010C-2H-4 W, 70.0–-72.0 cm	904HKMH	11.45	10.985	11.47	11.003	20	mochizuki904	2009-11-14T18:31:07Z	CKY000000000000020350
99	C9010C-2H-4 W, 80.0–-82.0 cm	904HKMH	11.55	11.076	11.57	11.094	20	mochizuki904	2009-11-14T18:31:07Z	CKY000000000000020450
100	C9010C-2H-4 W, 90.0–-92.0 cm	904HKMH	11.65	11.167	11.67	11.185	20	mochizuki904	2009-11-14T14:29:21Z	CKY000000000000015650
101	C9010C-2H-4 W, 100.0–-102.0 cm	904HKMH	11.75	11.257	11.77	11.275	20	mochizuki904	2009-11-14T18:31:07Z	CKY000000000000020550
102	C9010C-2H-4 W, 110.0–-112.0 cm	904HKMH	11.85	11.348	11.87	11.366	20	mochizuki904	2009-11-14T18:31:07Z	CKY000000000000020650
103	C9010C-2H-4 W, 120.0–-122.0 cm	904HKMH	11.95	11.439	11.97	11.457	20	mochizuki904	2009-11-14T14:29:21Z	CKY000000000000015750
104	C9010C-2H-4 W, 130.0–-132.0 cm	904HKMH	12.05	11.529	12.07	11.547	20	mochizuki904	2009-11-14T18:31:07Z	CKY000000000000020750
105	C9010C-2H-4 W, 140.0–-142.0 cm	904HKMH	12.15	11.62	12.17	11.638	20	mochizuki904	2009-11-14T18:31:07Z	CKY000000000000020850
106	C9010C-2H-5 W, 0.0–-2.0 cm	904HKMH	12.225	11.688	12.245	11.706	20	mochizuki904	2009-11-14T18:46:00Z	CKY000000000000021050
107	C9010C-2H-5 W, 10.0–-12.0 cm	904HKMH	12.325	11.778	12.345	11.797	20	mochizuki904	2009-11-14T18:46:00Z	CKY000000000000021150
108	C9010C-2H-5 W, 20.0–-22.0 cm	904HKMH	12.425	11.869	12.445	11.887	20	mochizuki904	2009-11-14T18:46:00Z	CKY000000000000021250
109	C9010C-2H-5 W, 40.0–-42.0 cm	904HKMH	12.625	12.05	12.645	12.068	20	mochizuki904	2009-11-14T18:46:00Z	CKY000000000000021350
110	C9010C-2H-6 W, 60.0–-62.0 cm	904HKMH	14.23	13.505	14.25	13.523	20	mochizuki904	2009-11-14T18:54:24Z	CKY000000000000021450
111	C9010C-2H-6 W, 80.0–-82.0 cm	904HKMH	14.43	13.687	14.45	13.705	20	mochizuki904	2009-11-14T18:54:24Z	CKY000000000000021550
112	C9010C-2H-6 W, 90.0–-92.0 cm	904HKMH	14.53	13.777	14.55	13.795	20	mochizuki904	2009-11-14T14:42:20Z	CKY000000000000016150
113	C9010C-2H-6 W, 100.0–-102.0 cm	904HKMH	14.63	13.868	14.65	13.886	20	mochizuki904	2009-11-14T18:54:24Z	CKY000000000000021650
114	C9010C-2H-6 W, 110.0–-112.0 cm	904HKMH	14.73	13.958	14.75	13.977	20	mochizuki904	2009-11-14T18:54:24Z	CKY000000000000021750
115	C9010C-2H-6 W, 120.0–-122.0 cm	904HKMH	14.83	14.049	14.85	14.067	20	mochizuki904	2009-11-14T14:42:20Z	CKY000000000000016250
116	C9010C-2H-6 W, 130.0–-132.0 cm	904HKMH	14.93	14.14	14.95	14.158	20	mochizuki904	2009-11-14T18:54:24Z	CKY000000000000021850
117	C9010C-2H-6 W, 140.0–-142.0 cm	904HKMH	15.03	14.231	15.05	14.249	20	mochizuki904	2009-11-14T18:54:24Z	CKY000000000000021950
118	C9010C-2H-7 W, 0.0–-2.0 cm	904HKMH	15.06	14.258	15.08	14.276	20	mochizuki904	2009-11-14T19:03:39Z	CKY000000000000022050
119	C9010C-2H-7 W, 10.0–-12.0 cm	904HKMH	15.16	14.348	15.18	14.366	20	mochizuki904	2009-11-14T19:03:39Z	CKY000000000000022150
120	C9010C-2H-7 W, 20.0–-22.0 cm	904HKMH	15.26	14.439	15.28	14.457	20	mochizuki904	2009-11-14T19:03:39Z	CKY000000000000022250
121	C9010C-2H-7 W, 40.0–-42.0 cm	904HKMH	15.46	14.62	15.48	14.638	20	mochizuki904	2009-11-14T19:03:39Z	CKY000000000000022350
122	C9010C-2H-7 W, 50.0–-52.0 cm	904HKMH	15.56	14.711	15.58	14.729	20	mochizuki904	2009-11-14T19:03:39Z	CKY000000000000022450
123	C9010C-2H-7 W, 60.0–-62.0 cm	904HKMH	15.66	14.802	15.68	14.82	20	mochizuki904	2009-11-14T14:42:20Z	CKY000000000000016350
124	C9010C-2H-7 W, 70.0–-72.0 cm	904HKMH	15.76	14.892	15.78	14.91	20	mochizuki904	2009-11-14T19:03:39Z	CKY000000000000022550
125	C9010C-2H-7 W, 80.0–-82.0 cm	904HKMH	15.86	14.983	15.88	15.001	20	mochizuki904	2009-11-14T19:03:39Z	CKY000000000000022650
126	C9010C-2H-7 W, 90.0–-92.0 cm	904HKMH	15.96	15.073	15.98	15.092	20	mochizuki904	2009-11-14T14:42:20Z	CKY000000000000016450
127	C9010C-2H-8 W, 0.0–-2.0 cm	904HKMH	16.065	15.169	16.085	15.187	20	mochizuki904	2009-11-14T19:14:10Z	CKY000000000000022750
128	C9010C-2H-8 W, 10.0–-12.0 cm	904HKMH	16.165	15.259	16.185	15.278	20	mochizuki904	2009-11-14T19:14:10Z	CKY000000000000022850
129	C9010C-2H-8 W, 21.0–-23.0 cm	904HKMH	16.275	15.359	16.295	15.377	20	mochizuki904	2009-11-14T19:14:10Z	CKY000000000000022950
130	C9010C-2H-8 W, 40.0–-42.0 cm	904HKMH	16.465	15.531	16.485	15.549	20	mochizuki904	2009-11-14T19:14:10Z	CKY000000000000023050
131	C9010C-2H-8 W, 50.0–-52.0 cm	904HKMH	16.565	15.622	16.585	15.64	20	mochizuki904	2009-11-14T19:14:10Z	CKY000000000000023150
132	C9010C-2H-8 W, 59.0–-61.0 cm	904HKMH	16.655	15.703	16.675	15.722	20	mochizuki904	2009-11-14T15:06:16Z	CKY000000000000016550
133	C9010D-1H-1 W, 60.0–-62.0 cm	904HKMH	15.58	15.518	15.6	15.536	20	mochizuki904	2009-11-14T22:40:23Z	CKY000000000000024750
134	C9010D-1H-1 W, 90.0–-92.0 cm	904HKMH	15.88	15.787	15.9	15.804	20	mochizuki904	2009-11-14T22:40:23Z	CKY000000000000024850
135	C9010D-1H-1 W, 120.0–-122.0 cm	904HKMH	16.18	16.056	16.2	16.073	20	mochizuki904	2009-11-14T22:40:23Z	CKY000000000000024950
136	C9010D-1H-2 W, 60.0–-62.0 cm	904HKMH	17	16.79	17.02	16.808	20	mochizuki904	2009-11-14T23:03:54Z	CKY000000000000025450
137	C9010D-1H-2 W, 90.0–-92.0 cm	904HKMH	17.3	17.059	17.32	17.077	20	mochizuki904	2009-11-14T23:03:54Z	CKY000000000000025550
138	C9010D-1H-2 W, 120.0–-122.0 cm	904HKMH	17.6	17.328	17.62	17.346	20	mochizuki904	2009-11-14T23:03:54Z	CKY000000000000025650
139	C9010D-1H-3 W, 60.0–-62.0 cm	904HKMH	18.505	18.139	18.525	18.157	20	mochizuki904	2009-11-14T23:03:54Z	CKY000000000000025850
140	C9010D-1H-3 W, 90.0–-92.0 cm	904HKMH	18.805	18.408	18.825	18.426	20	mochizuki904	2009-11-14T23:03:54Z	CKY000000000000025950
141	C9010D-1H-4 W, 60.0–-62.0 cm	904HKMH	19.92	19.407	19.94	19.425	20	mochizuki904	2009-11-14T23:31:52Z	CKY000000000000026350

142	C9010D-1H-4 W, 90.0--92.0 cm	904HKMH	20.22	19.676	20.24	19.694	20	mochizuki904	2009-11-14T23:31:52Z	CKY000000000000026450
143	C9010D-1H-5 W, 60.0--62.0 cm	904HKMH	21.405	20.738	21.425	20.756	20	mochizuki904	2009-11-14T23:42:57Z	CKY000000000000026750
144	C9010D-1H-5 W, 90.0--92.0 cm	904HKMH	21.705	21.007	21.725	21.025	20	mochizuki904	2009-11-14T23:42:57Z	CKY000000000000026850
145	C9010D-1H-5 W, 120.0--122.0 cm	904HKMH	22.005	21.276	22.025	21.294	20	mochizuki904	2009-11-14T23:42:57Z	CKY000000000000026950
146	C9010D-1H-6 W, 60.0--62.0 cm	904HKMH	22.845	22.029	22.865	22.047	20	mochizuki904	2009-11-14T23:57:00Z	CKY000000000000027150
147	C9010D-1H-6 W, 88.0--90.0 cm	904HKMH	23.125	22.28	23.145	22.298	20	mochizuki904	2009-11-14T23:57:00Z	CKY000000000000027250
148	C9010D-1H-7 W, 58.0--60.0 cm	904HKMH	24.035	23.095	24.055	23.113	20	mochizuki904	2009-11-15T00:17:33Z	CKY000000000000027450
149	C9010D-1H-7 W, 90.0--92.0 cm	904HKMH	24.355	23.382	24.375	23.4	20	mochizuki904	2009-11-15T00:17:33Z	CKY000000000000027550
150	C9010D-1H-8 W, 60.0--62.0 cm	904HKMH	25.06	24.014	25.08	24.032	20	mochizuki904	2009-11-15T00:33:39Z	CKY000000000000027750
151	C9010D-2H-2 W, 90.0--92.0 cm	904HKMH	25.69	25.59	25.71	25.608	20	koyanagi904	2009-11-15T01:18:14Z	CKY000000000000028050
152	C9010D-2H-2 W, 120.0--122.0 cm	904HKMH	25.99	25.865	26.01	25.883	20	koyanagi904	2009-11-15T01:18:14Z	CKY000000000000028150
153	C9010D-2H-3 W, 60.0--62.0 cm	904HKMH	26.795	26.603	26.815	26.621	20	koyanagi904	2009-11-15T01:45:11Z	CKY000000000000028550
154	C9010D-2H-3 W, 93.0--95.0 cm	904HKMH	27.125	26.905	27.145	26.924	20	koyanagi904	2009-11-15T01:45:11Z	CKY000000000000028650
155	C9010D-2H-3 W, 120.0--122.0 cm	904HKMH	27.395	27.153	27.415	27.171	20	koyanagi904	2009-11-15T01:45:11Z	CKY000000000000028750
156	C9010D-2H-4 W, 60.0--62.0 cm	904HKMH	28.2	27.891	28.22	27.91	20	koyanagi904	2009-11-15T01:50:06Z	CKY000000000000028950
157	C9010D-2H-6 W, 60.0--62.0 cm	904HKMH	30.55	30.046	30.57	30.065	20	koyanagi904	2009-11-15T02:39:45Z	CKY000000000000029250
158	C9010D-2H-6 W, 90.0--92.0 cm	904HKMH	30.85	30.321	30.87	30.34	20	koyanagi904	2009-11-15T02:39:45Z	CKY000000000000029350
159	C9010D-2H-6 W, 114.0--116.0 cm	904HKMH	31.09	30.541	31.11	30.56	20	koyanagi904	2009-11-15T02:39:45Z	CKY000000000000029450
160	C9010D-2H-7 W, 60.0--62.0 cm	904HKMH	31.955	31.334	31.975	31.353	20	koyanagi904	2009-11-15T03:13:55Z	CKY000000000000029650
161	C9010D-2H-7 W, 88.0--90.0 cm	904HKMH	32.235	31.591	32.255	31.61	20	koyanagi904	2009-11-15T03:13:55Z	CKY000000000000029750
162	C9010D-2H-7 W, 123.0--125.0 cm	904HKMH	32.585	31.912	32.605	31.931	20	koyanagi904	2009-11-15T03:13:55Z	CKY000000000000029850
163	C9010D-2H-8 W, 60.0--62.0 cm	904HKMH	33.36	32.623	33.38	32.641	20	koyanagi904	2009-11-15T03:41:35Z	CKY000000000000030250
164	C9010D-2H-8 W, 90.0--92.0 cm	904HKMH	33.66	32.898	33.68	32.916	20	koyanagi904	2009-11-15T03:41:35Z	CKY000000000000030350
165	C9010D-2H-9 W, 57.0--59.0 cm	904HKMH	34.33	33.512	34.35	33.531	20	koyanagi904	2009-11-15T04:00:01Z	CKY000000000000030650
166	C9010D-3H-1 W, 60.0--62.0 cm	904HKMH	34.58	34.58	34.6	34.6	20	koyanagi904	2009-11-15T04:29:35Z	CKY000000000000030850
167	C9010D-3H-1 W, 104.0--106.0 cm	904HKMH	35.02	35.02	35.04	35.04	20	koyanagi904	2009-11-15T04:29:35Z	CKY000000000000030950
168	C9010D-3H-5 W, 60.0--62.0 cm	904HKMH	39.465	39.465	39.485	39.485	20	koyanagi904	2009-11-15T05:12:03Z	CKY000000000000031250
169	C9010D-3H-5 W, 90.0--92.0 cm	904HKMH	39.765	39.765	39.785	39.785	20	koyanagi904	2009-11-15T05:12:03Z	CKY000000000000031350
170	C9010D-3H-5 W, 120.0--122.0 cm	904HKMH	40.065	40.065	40.085	40.085	20	koyanagi904	2009-11-15T05:12:04Z	CKY000000000000031450
171	C9010D-3H-6 W, 60.0--62.0 cm	904HKMH	40.88	40.88	40.9	40.9	20	koyanagi904	2009-11-15T05:40:27Z	CKY000000000000031650
172	C9010D-3H-6 W, 90.0--92.0 cm	904HKMH	41.18	41.18	41.2	41.2	20	koyanagi904	2009-11-15T05:40:27Z	CKY000000000000031750
173	C9010D-4H-2 W, 63.0--65.0 cm	904HKMH	44.375	44.325	44.395	44.344	20	koyanagi904	2009-11-15T07:16:23Z	CKY000000000000032050
174	C9010D-4H-2 W, 93.0--95.0 cm	904HKMH	44.675	44.609	44.695	44.627	20	koyanagi904	2009-11-15T07:16:23Z	CKY000000000000032150
175	C9010D-4H-2 W, 120.0--122.0 cm	904HKMH	44.945	44.863	44.965	44.882	20	koyanagi904	2009-11-15T07:16:23Z	CKY000000000000032250
176	C9010D-4H-3 W, 65.0--67.0 cm	904HKMH	45.75	45.624	45.77	45.643	20	koyanagi904	2009-11-15T07:46:55Z	CKY000000000000032450
177	C9010D-4H-3 W, 90.0--92.0 cm	904HKMH	46	45.86	46.02	45.879	20	koyanagi904	2009-11-15T07:46:55Z	CKY000000000000032550
178	C9010D-4H-3 W, 120.0--122.0 cm	904HKMH	46.3	46.143	46.32	46.162	20	koyanagi904	2009-11-15T07:46:55Z	CKY000000000000032650
179	C9010D-4H-4 W, 60.0--62.0 cm	904HKMH	47.085	46.884	47.105	46.903	20	koyanagi904	2009-11-15T08:24:28Z	CKY000000000000033050
180	C9010D-4H-4 W, 90.0--92.0 cm	904HKMH	47.385	47.168	47.405	47.187	20	koyanagi904	2009-11-15T08:24:28Z	CKY000000000000033150
181	C9010D-4H-4 W, 120.0--122.0 cm	904HKMH	47.685	47.451	47.705	47.47	20	koyanagi904	2009-11-15T08:24:28Z	CKY000000000000033250
182	C9010D-4H-5 W, 60.0--62.0 cm	904HKMH	48.485	48.206	48.505	48.225	20	koyanagi904	2009-11-15T08:53:48Z	CKY000000000000033550
183	C9010D-4H-5 W, 88.0--90.0 cm	904HKMH	48.765	48.471	48.785	48.49	20	koyanagi904	2009-11-15T08:53:48Z	CKY000000000000033650
184	C9010D-4H-5 W, 120.0--122.0 cm	904HKMH	49.085	48.773	49.105	48.792	20	koyanagi904	2009-11-15T08:53:48Z	CKY000000000000033750
185	C9010D-4H-6 W, 60.0--62.0 cm	904HKMH	49.9	49.543	49.92	49.562	20	koyanagi904	2009-11-15T09:27:12Z	CKY000000000000033950
186	C9010D-6X-1 W, 60.0--62.0 cm	904HKMH	63.08	63.08	63.1	63.1	20	koyanagi904	2009-11-15T11:26:39Z	CKY000000000000034250
187	C9010D-6X-1 W, 88.0--90.0 cm	904HKMH	63.36	63.36	63.38	63.38	20	koyanagi904	2009-11-15T11:26:39Z	CKY000000000000034350
188	C9010D-6X-1 W, 123.0--125.0 cm	904HKMH	63.71	63.71	63.73	63.73	20	koyanagi904	2009-11-15T11:26:39Z	CKY000000000000034450
189	C9010D-6X-2 W, 55.0--57.0 cm	904HKMH	64.44	64.44	64.46	64.46	20	mochizuki904	2009-11-15T12:13:36Z	CKY000000000000034650
190	C9010D-6X-2 W, 90.0--92.0 cm	904HKMH	64.79	64.79	64.81	64.81	20	mochizuki904	2009-11-15T12:13:36Z	CKY000000000000034750
191	C9010D-6X-2 W, 120.0--122.0 cm	904HKMH	65.09	65.09	65.11	65.11	20	mochizuki904	2009-11-15T12:13:36Z	CKY000000000000034850
192	C9010D-7X-1 W, 60.0--62.0 cm	904HKMH	72.58	72.58	72.6	72.6	20	mochizuki904	2009-11-15T12:41:46Z	CKY000000000000035050
193	C9010D-7X-1 W, 90.0--92.0 cm	904HKMH	72.88	72.88	72.9	72.9	20	mochizuki904	2009-11-15T12:41:46Z	CKY000000000000035150
194	C9010D-7X-2 W, 60.0--62.0 cm	904HKMH	73.96	73.96	73.98	73.98	20	mochizuki904	2009-11-15T12:41:46Z	CKY000000000000035350
195	C9010D-7X-2 W, 90.0--92.0 cm	904HKMH	74.26	74.26	74.28	74.28	20	mochizuki904	2009-11-15T12:41:46Z	CKY000000000000035450
196	C9010D-7X-4 W, 60.0--62.0 cm	904HKMH	75.715	75.715	75.735	75.735	20	mochizuki904	2009-11-15T13:03:49Z	CKY000000000000035750
197	C9010D-9X-1 W, 60.0--62.0 cm	904HKMH	91.58	91.58	91.6	91.6	20	mochizuki904	2009-11-15T14:45:49Z	CKY000000000000035950
198	C9010D-9X-1 W, 90.0--92.0 cm	904HKMH	91.88	91.88	91.9	91.9	20	mochizuki904	2009-11-15T14:45:49Z	CKY000000000000036050
199	C9010D-9X-1 W, 120.0--122.0 cm	904HKMH	92.18	92.18	92.2	92.2	20	mochizuki904	2009-11-15T14:45:49Z	CKY000000000000036150
200	C9010D-9X-2 W, 60.0--62.0 cm	904HKMH	92.86	92.86	92.88	92.88	20	mochizuki904	2009-11-15T14:56:50Z	CKY000000000000036350
201	C9010D-9X-3 W, 60.0--62.0 cm	904HKMH	93.875	93.875	93.895	93.895	20	mochizuki904	2009-11-15T14:58:43Z	CKY000000000000036550
202	C9010D-9X-4 W, 60.0--62.0 cm	904HKMH	94.735	94.735	94.755	94.755	20	mochizuki904	2009-11-15T15:17:25Z	CKY000000000000036950
203	C9010D-9X-4 W, 90.0--92.0 cm	904HKMH	95.035	95.035	95.055	95.055	20	mochizuki904	2009-11-15T15:17:25Z	CKY000000000000037050
204	C9010D-9X-4 W, 120.0--122.0 cm	904HKMH	95.335	95.335	95.355	95.355	20	mochizuki904	2009-11-15T15:17:25Z	CKY000000000000037150
205	C9010D-12X-1 W, 55.0--57.0 cm	904HKMH	118.53	118.53	118.55	118.55	20	mochizuki904	2009-11-15T16:31:51Z	CKY000000000000037350
206	C9010D-13X-1 W, 70.0--72.0 cm	904HKMH	128.18	128.18	128.2	128.2	20	mochizuki904	2009-11-15T20:00:07Z	CKY000000000000038250
207	C9010D-14X-1 W, 58.0--60.0 cm	904HKMH	137.56	137.56	137.58	137.58	20	mochizuki904	2009-11-15T22:54:37Z	CKY000000000000039050
208	C9010D-14X-1 W, 90.0--92.0 cm	904HKMH	137.88	137.88	137.9	137.9	20	mochizuki904	2009-11-15T22:54:37Z	CKY000000000000039150
209	C9010D-14X-1 W, 120.0--122.0 cm	904HKMH	138.18	138.18	138.2	138.2	20	mochizuki904	2009-11-15T22:54:37Z	CKY000000000000039250
210	C9010D-14X-2 W, 60.0--62.0 cm	904HKMH	138.98	138.98	139	139	20	mochizuki904	2009-11-15T22:54:37Z	CKY000000000000038850
211	C9010D-14X-2 W, 90.0--92.0 cm	904HKMH	139.28	139.28	139.3	139.3	20	mochizuki904	2009-11-15T22:54:37Z	CKY000000000000038950
212	C9010D-15X-1 W, 60.0--62.0 cm	904HKMH	147.08	147.08	147.1	147.1	20	koyanagi904	2009-11-16T03:46:10Z	CKY000000000000039950
213	C9010D-15X-1 W, 90.0--92.0 cm	904HKMH	147.38	147.38	147.4	147.4	20	koyanagi904	2009-11-16T03:46:10Z	CKY000000000000040050

214	C9010D-15X-1 W, 120.0--122.0 cm	904HKMH	147.68	147.68	147.7	147.7	20	koyanagi904	2009-11-16T03:46:10Z CKY000000000000040150
215	C9010D-15X-2 W, 60.0--62.0 cm	904HKMH	148.48	148.48	148.5	148.5	20	koyanagi904	2009-11-16T04:14:55Z CKY000000000000040350
216	C9010D-15X-2 W, 90.0--92.0 cm	904HKMH	148.78	148.78	148.8	148.8	20	koyanagi904	2009-11-16T04:14:55Z CKY000000000000040450
217	C9010D-15X-2 W, 120.0--122.0 cm	904HKMH	149.08	149.08	149.1	149.1	20	koyanagi904	2009-11-16T04:14:55Z CKY000000000000040550
218	C9010D-15X-3 W, 60.0--62.0 cm	904HKMH	149.885	149.885	149.905	149.905	20	koyanagi904	2009-11-16T04:46:34Z CKY000000000000040750
219	C9010D-15X-4 W, 60.0--62.0 cm	904HKMH	150.895	150.895	150.915	150.915	20	koyanagi904	2009-11-16T05:18:32Z CKY000000000000041050
220	C9010D-16X-1 W, 60.0--62.0 cm	904HKMH	156.58	156.58	156.6	156.6	20	koyanagi904	2009-11-16T06:42:08Z CKY000000000000041350
221	C9010D-16X-1 W, 90.0--92.0 cm	904HKMH	156.88	156.88	156.9	156.9	20	koyanagi904	2009-11-16T06:42:09Z CKY000000000000041450
222	C9010D-16X-1 W, 120.0--122.0 cm	904HKMH	157.18	157.18	157.2	157.2	20	koyanagi904	2009-11-16T06:42:09Z CKY000000000000041550
223	C9010D-16X-2 W, 60.0--62.0 cm	904HKMH	157.985	157.985	158.005	158.005	20	koyanagi904	2009-11-16T07:13:17Z CKY000000000000041750
224	C9010D-16X-2 W, 90.0--92.0 cm	904HKMH	158.285	158.285	158.305	158.305	20	koyanagi904	2009-11-16T07:13:17Z CKY000000000000041850
225	C9010D-16X-2 W, 120.0--122.0 cm	904HKMH	158.585	158.585	158.605	158.605	20	koyanagi904	2009-11-16T07:13:17Z CKY000000000000041950
226	C9010D-16X-3 W, 60.0--62.0 cm	904HKMH	159.365	159.365	159.385	159.385	20	koyanagi904	2009-11-16T07:44:01Z CKY000000000000042150
227	C9010D-16X-3 W, 90.0--92.0 cm	904HKMH	159.665	159.665	159.685	159.685	20	koyanagi904	2009-11-16T07:44:01Z CKY000000000000042250
228	C9010D-16X-3 W, 120.0--122.0 cm	904HKMH	159.965	159.965	159.985	159.985	20	koyanagi904	2009-11-16T07:44:01Z CKY000000000000042350
229	C9010D-16X-4 W, 58.0--60.0 cm	904HKMH	160.75	160.75	160.77	160.77	20	koyanagi904	2009-11-16T08:15:52Z CKY000000000000042550
230	C9010D-18X-1 W, 14.0--16.0 cm	904HKMH	175.12	175.12	175.14	175.14	20	koyanagi904	2009-11-16T08:57:26Z CKY000000000000042850
231	C9010D-19X-1 W, 60.0--62.0 cm	904HKMH	185.08	185.08	185.1	185.1	20	koyanagi904	2009-11-16T11:44:39Z CKY000000000000043150
232	C9010D-21X-2 W, 60.0--62.0 cm	904HKMH	204.585	204.585	204.605	204.605	20	mochizuki904	2009-11-16T15:11:14Z CKY000000000000043750
233	C9010D-27X-1 W, 43.0--45.0 cm	904HKMH	255.91	255.91	255.93	255.93	25	koyanagi904	2009-11-17T06:28:54Z CKY000000000000044950
234	C9010D-27X-2 W, 47.0--49.0 cm	904HKMH	256.62	256.62	256.64	256.64	20	koyanagi904	2009-11-17T06:47:15Z CKY000000000000045150
235	C9010D-27X-CC W, 15.0--17.0 cm	904HKMH	256.84	256.84	256.86	256.86	20	koyanagi904	2009-11-17T07:08:48Z CKY000000000000045350
236	C9010D-28X-1 W, 60.0--62.0 cm	904HKMH	265.58	265.58	265.6	265.6	20	koyanagi904	2009-11-17T08:43:39Z CKY000000000000045550

Exp.904 SS sample list

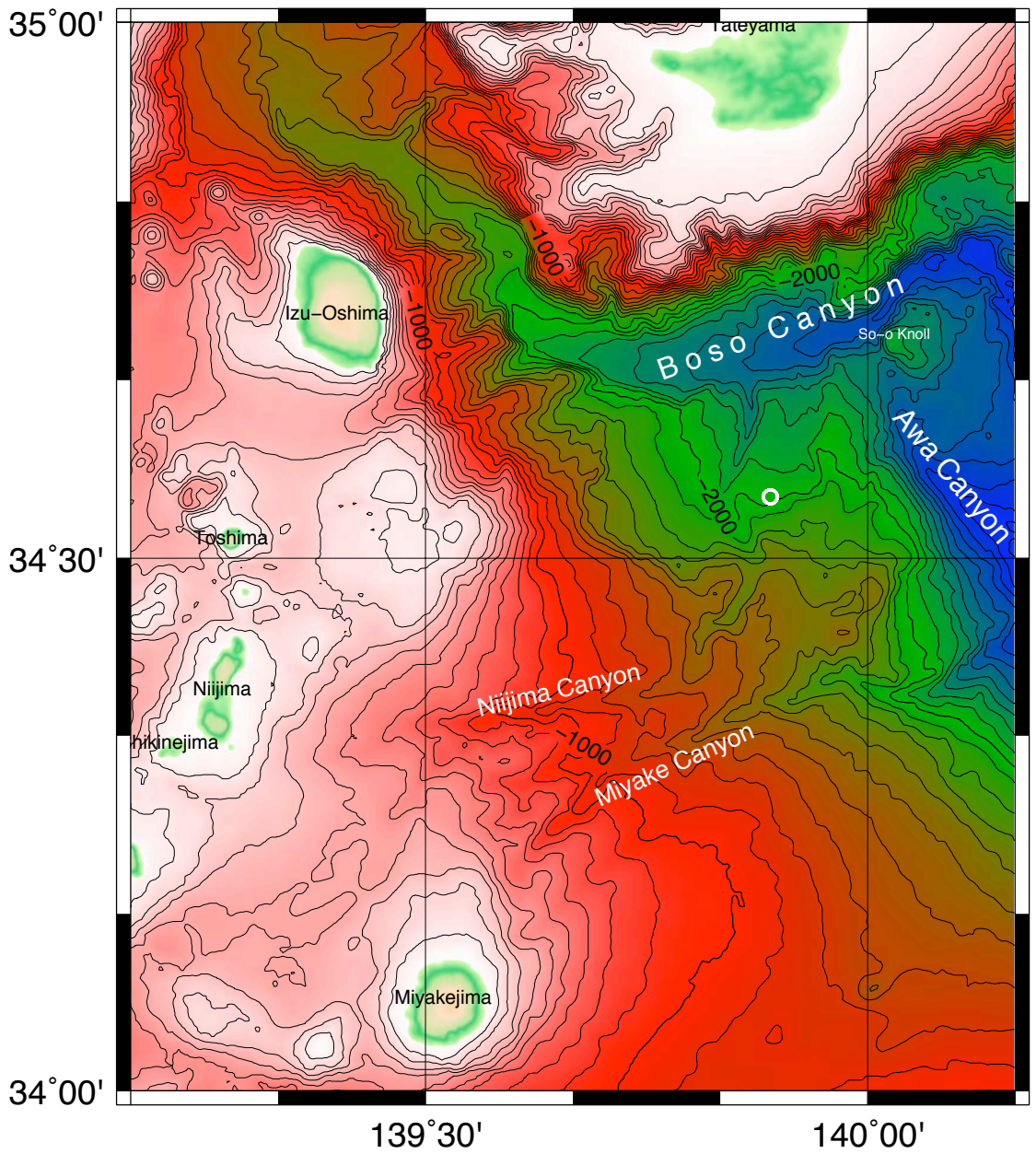
No.	Sample source	Sample code	Top Depth [m CSF-A]	Top Depth [m CSF-B]	Bottom Depth [m CSF-A]	Bottom Depth [m CSF-B]	Sample volume (cm3)	Sample entered by	Sample time-stamp	J-CORES sample ID
1	C9010A-1H-1 A, 14.0 cm	SS	0.14	0.14	0.14	0.14	0.1	nomaki904	2009-11-10T07:02:19Z	CKY000000000000004350
2	C9010A-1H-1 A, 112.0 cm	SS	1.12	1.12	1.12	1.12	0.1	nomaki904	2009-11-10T07:02:36Z	CKY000000000000004450
3	C9010B-1H-1 A, 18.0 cm	SS	0.18	0.18	0.18	0.18	0.1	nomaki904	2009-11-10T07:04:08Z	CKY000000000000004550
4	C9010B-1H-1 A, 120.0 cm	SS	1.2	1.2	1.2	1.2	0.1	nomaki904	2009-11-10T07:07:39Z	CKY000000000000004650
5	C9010B-2H-4 A, 130.0 cm	SS	10.15	9.869	10.15	9.869	0.1	nomaki904	2009-11-10T07:07:39Z	CKY000000000000004750
6	C9010B-3H-7 A, 53.0 cm	SS	22.68	21.757	22.68	21.757	0.1	nomaki904	2009-11-10T07:07:39Z	CKY000000000000004850
7	C9010B-4H-2 A, 82.0 cm	SS	24.845	24.712	24.845	24.712	0.1	mochizuki904	2009-11-10T12:12:31Z	CKY000000000000005350
8	C9010B-5H-4 A, 10.0 cm	SS	35.29	35.22	35.29	35.22	0.1	mochizuki904	2009-11-10T12:18:20Z	CKY000000000000005450
9	C9010B-5H-6 A, 86.0 cm	SS	38.485	38.311	38.485	38.311	0.1	mochizuki904	2009-11-10T12:21:35Z	CKY000000000000005650
10	C9010B-5H-6 A, 110.0 cm	SS	38.725	38.543	38.725	38.543	0.1	mochizuki904	2009-11-10T12:21:35Z	CKY000000000000005750
11	C9010B-5H-7 A, 15.0 cm	SS	39.18	38.983	39.18	38.983	0.1	mochizuki904	2009-11-10T12:21:35Z	CKY000000000000005850
12	C9010B-5H-7 A, 64.0 cm	SS	39.67	39.457	39.67	39.457	0.1	mochizuki904	2009-11-10T12:21:36Z	CKY000000000000005950
13	C9010B-5H-8 A, 48.0 cm	SS	40.91	40.657	40.91	40.657	0.1	mochizuki904	2009-11-10T12:21:36Z	CKY000000000000006050
14	C9010B-6H-5 A, 80.0 cm	SS	47.935	47.556	47.935	47.556	0.1	mochizuki904	2009-11-10T12:24:03Z	CKY000000000000006150
15	C9010B-6H-5 A, 90.0 cm	SS	48.035	47.649	48.035	47.649	0.1	mochizuki904	2009-11-10T12:24:03Z	CKY000000000000006250
16	C9010B-6H-8 A, 85.0 cm	SS	52.205	51.522	52.205	51.522	0.1	mochizuki904	2009-11-10T12:24:03Z	CKY000000000000006350
17	C9010B-8X-4 A, 20.0 cm	SS	64.75	64.75	64.75	64.75	0.1	nomaki904	2009-11-10T07:07:39Z	CKY000000000000004950
18	C9010B-11X-3 A, 75.0 cm	SS	93.89	93.89	93.89	93.89	0.1	nomaki904	2009-11-10T07:07:39Z	CKY000000000000005050
19	C9010B-14X-3 A, 60.0 cm	SS	122.035	122.035	122.035	122.035	0.1	mochizuki904	2009-11-10T22:37:10Z	CKY000000000000006550
20	C9010B-14X-4 A, 54.5 cm	SS	123.18	123.18	123.18	123.18	0.1	mochizuki904	2009-11-10T22:37:10Z	CKY000000000000006650
21	C9010B-15X-2 A, 90.0 cm	SS	130.565	130.51	130.565	130.51	0.1	mochizuki904	2009-11-10T22:39:09Z	CKY000000000000006750
22	C9010B-15X-6 A, 52.0 cm	SS	134.325	134.177	134.325	134.177	0.1	mochizuki904	2009-11-10T22:39:09Z	CKY000000000000006850
23	C9010B-15X-8 A, 26.0 cm	SS	136.395	136.196	136.395	136.196	0.1	mochizuki904	2009-11-10T22:39:53Z	CKY000000000000006950
24	C9010B-16X-2 A, 56.0 cm	SS	139.4	139.4	139.4	139.4	0.1	mochizuki904	2009-11-10T22:41:01Z	CKY000000000000007050
25	C9010B-16X-2 A, 60.0 cm	SS	139.44	139.44	139.44	139.44	0.1	mochizuki904	2009-11-10T22:41:01Z	CKY000000000000007150
26	C9010D-3H-5 A, 73.0 cm	SS	39.595	39.595	39.595	39.595	0.1	nomaki904	2009-11-16T09:15:46Z	CKY000000000000042950
27	C9010D-15X-2 A, 50.0 cm	SS	148.38	148.38	148.38	148.38	0.1	nomaki904	2009-11-16T05:07:36Z	CKY000000000000040850
28	C9010D-19X-1 A, 87.0 cm	SS	185.35	185.35	185.35	185.35	0.1	yasunagam	2009-11-17T15:00:33Z	CKY000000000000045950
29	C9010D-21X-1 A, 45.0 cm	SS	203.93	203.93	203.93	203.93	0.1	yasunagam	2009-11-17T15:00:33Z	CKY000000000000046050

Table 6-5-4-1: Census counts to facilitate the interpretation of plots of stratigraphic trends in sediment composition at Hole C9010B.

	Core	Sec.	Int.	lithology	Nannofossils	Diatoms	Sponge Spic	Radiolarians	Foraminifers	Glass	Opx.	Cpx.	Pl.	Pumice	Scoria	Abbr.		Parcentage
904-C9010B	1H	1	18.0	Nannofossil and diatom clay	A	A	R	VR	VR	VR	VR	VR	VR			A	Abundant	20~
	1H	1	120.0	Nannofossil and diatom clay	A	A	R	VR	VR	VR	VR	VR	VR			C	Common	10~20
	2H	4	130.0	Nannofossil and diatom clay	A	A	R	VR	VR	VR	VR	VR	VR			R	Rare	3~10
	3H	7	53.0	Nannofossil and diatom clay	A	A	R	VR	VR	VR	VR	VR	VR			VR	Very Rare	0~3
	4H	2	82.0	Nannofossil and diatom clay	A	A	VR	VR	VR	VR	VR	VR	VR			N	None	0
	5H	4	10.0	Nannofossil and diatom clay	A	A	R	VR	VR	VR	VR	VR	VR					
	5H	6	86.0	Nannofossil clay	A	C	R	VR	VR	VR	VR	VR	VR					
	5H	6	110.0	Nannofossil clay	A	C	VR	VR	VR	VR	VR	VR	VR					
	5H	7	15.0	Nannofossil clay	C	C	VR	VR	VR	VR	VR	VR	VR					
	5H	7	64.0	Nannofossil clay	C	C	VR	VR	VR	VR	VR	VR	VR					
	5H	8	48.0		C	C	VR	VR	VR	R	VR	VR	R					
	6H	5	80.0	Sandy Silt	R	VR	VR	N	VR	A	R	R	R					
	6H	5	90.0	Nannofossil clay	A	C	VR	VR	VR	VR	VR	VR	VR					
	6H	8	85.0	Nannofossil clay	A	R	VR	VR	VR	VR	VR	VR	VR					
	8X	4	20.0	Nannofossil clay	A	R	VR	VR	VR	VR	VR	VR	VR					
	11X	3	75.0	Nannofossil clay	A	R	VR	VR	VR	VR	VR	VR	VR					
	14X	3	60.0	Nannofossil clay	A	R	VR	VR	VR	VR	VR	VR	VR					
	14X	4	54.5	Coarse ash with nannofossil	C	N	N	N	N	A	VR	VR	VR					
	15X	2	90.0	Nannofossil clay	A	R	VR	VR	VR	VR	VR	VR	VR					
	15X	6	52.0	Nannofossil clay	A	R	VR	VR	VR	VR	VR	VR	VR					
	15X	8	26.0	Sandy Silt with nannofossil	C	N	N	N	N	A	R	R	R					
	16X	2	56.0	Clay with nannofossil	C	R	VR	VR	VR	VR	VR	VR	VR					
	16X	2	60.0	Nannofossil clay	A	R	VR	VR	VR	VR	VR	VR	VR					

Figures

Fig. 2-1: Site location and bathymetry. White open circles in Figs. a and b, indicate Site C9010.


35°00'
34°30'
34°00'
139°30'
140°00'
Tateyama
Izu–Oshima
Toshima
Niijima
hikinejima
Miyakejima
-1000
-2000
Boso Canyon
So–o Knoll
Awa Canyon
Niijima Canyon
Miyake Canyon

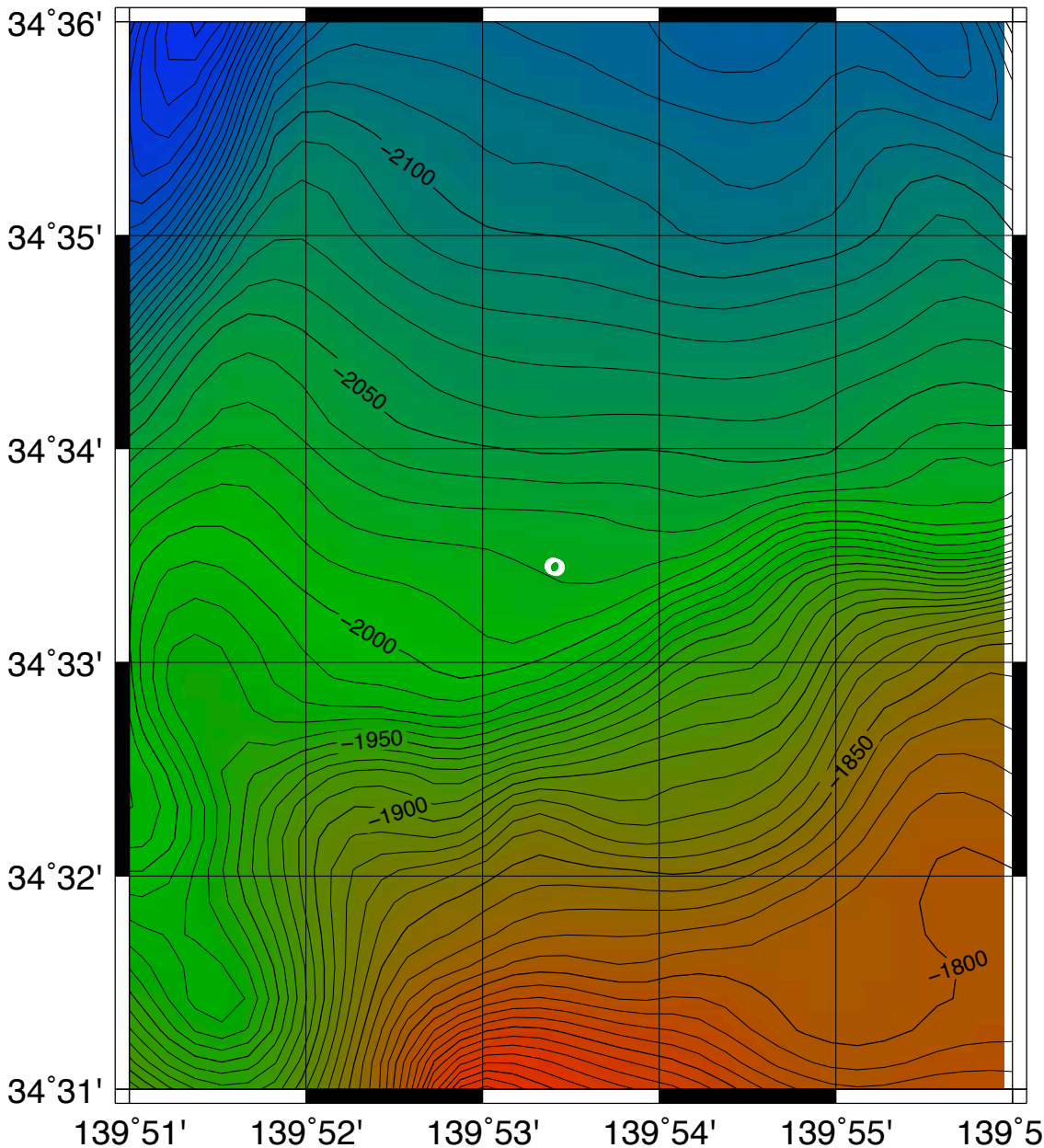
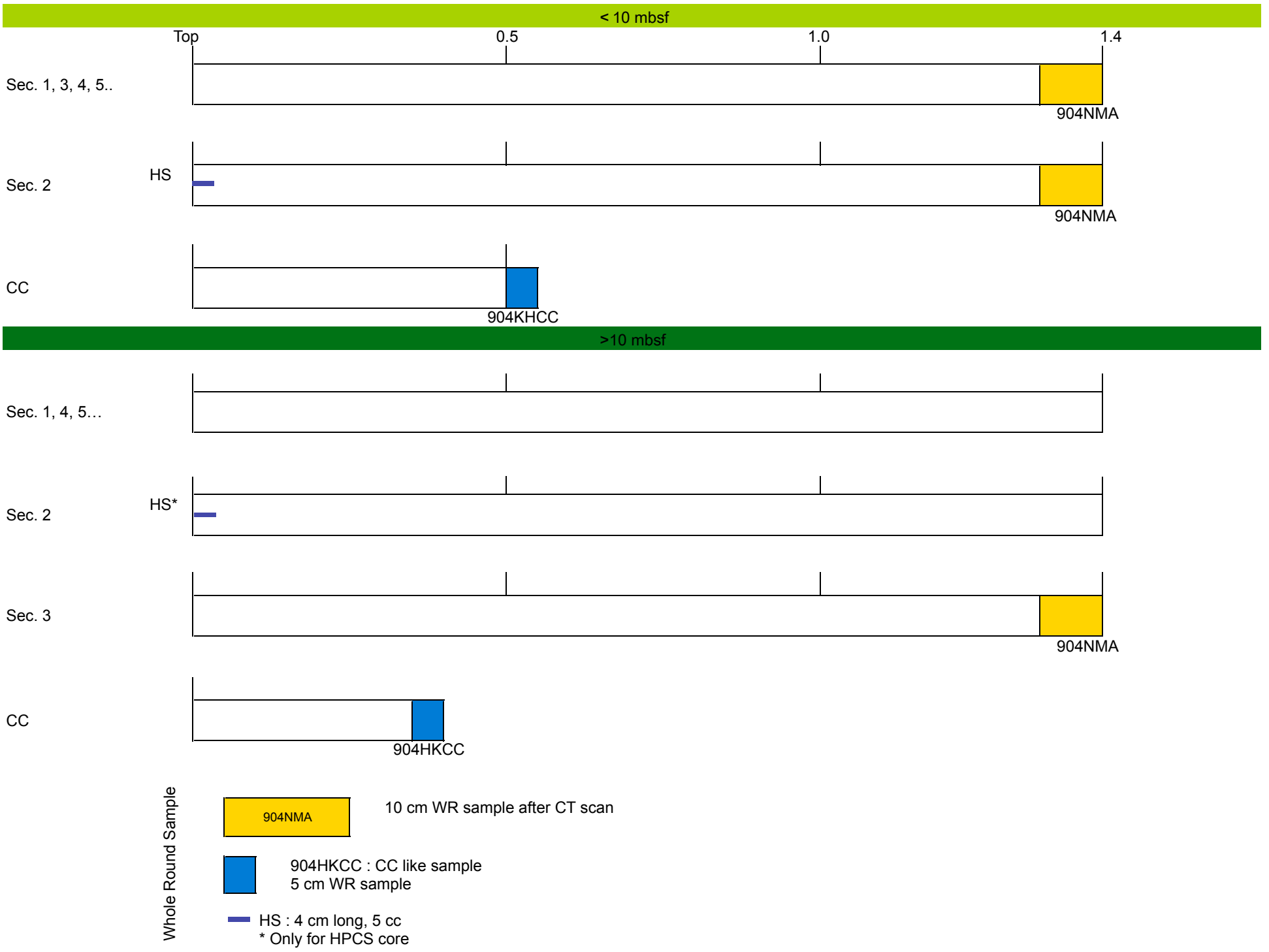

34°36'
34°35'
34°34'
34°33'
34°32'
34°31'
139°51'
139°52'
139°53'
139°54'
139°55'
139°56'
-2100
-2050
-2000
-1950
-1900
-1850
-1800

Fig. 4-1-1: Visualized plan showing where-to take samples at cores of each hole.

Exp.904 Sampling Plan

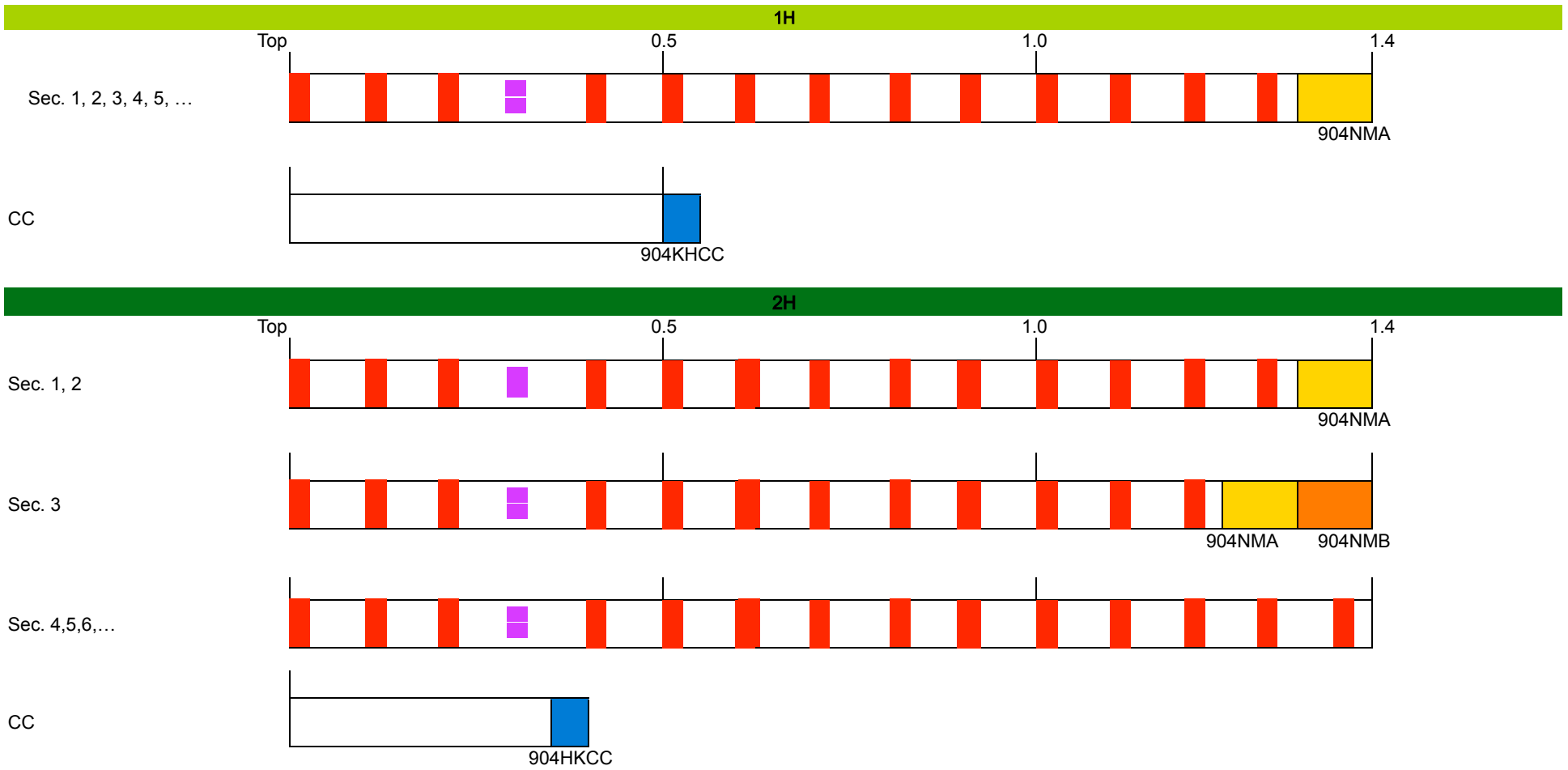
Hole A and B



To change sampling position, ask Curator before doing that.
To take another sample, another Sample Request needs to be approved by Azuma, Director General, CDEX. Contact EPM.

Exp.904 Sampling Plan

Hole C

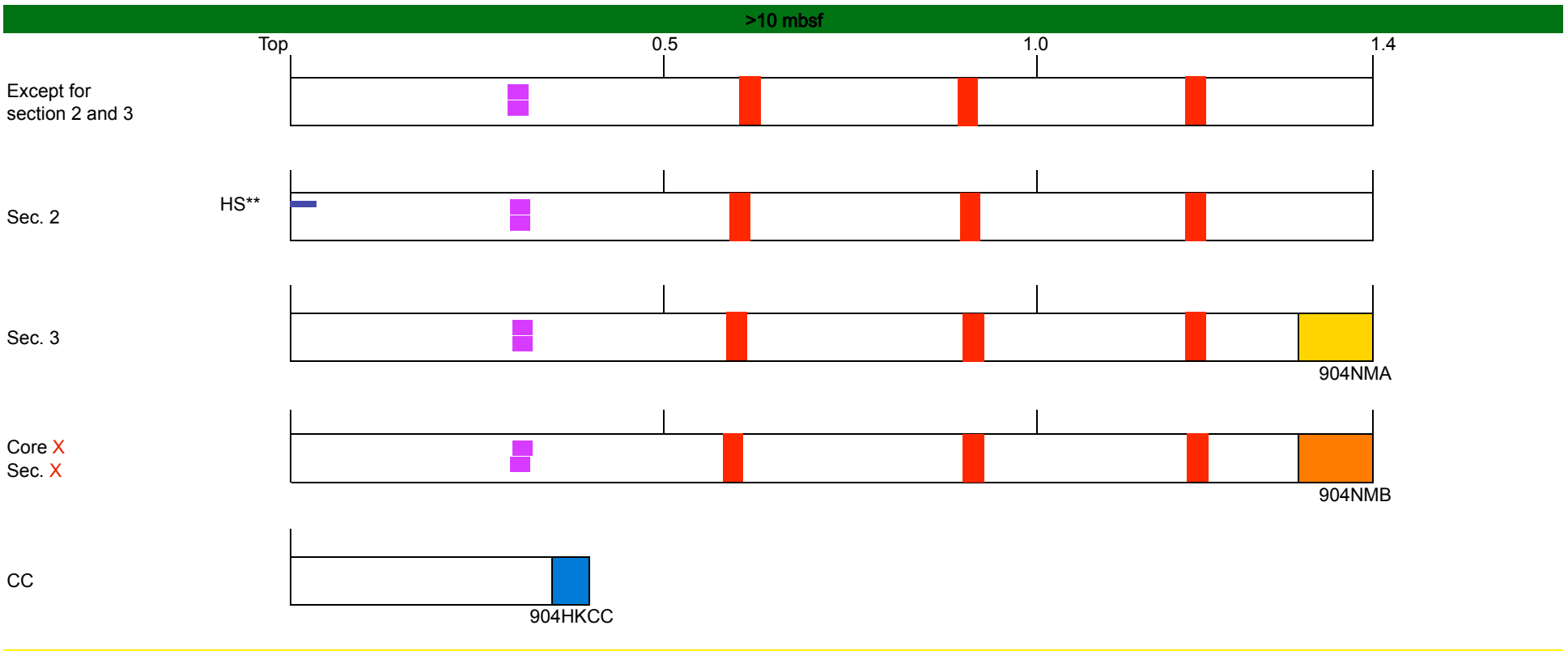


Whole Round Sample	904NMA	10 cm WR sample after CT scan
	904NMB	10 cm WR sample before CT scan
		904HKCC : PAL like sample 5 cm WR sample, 175 cc from bottom of CC
Discrete samples		904HKMH : 2 cm long half round core sample, 20 cc, 3 sample / section
		904HKMC : 2 cm Cubed sample, 14 cc, 2 samples / section

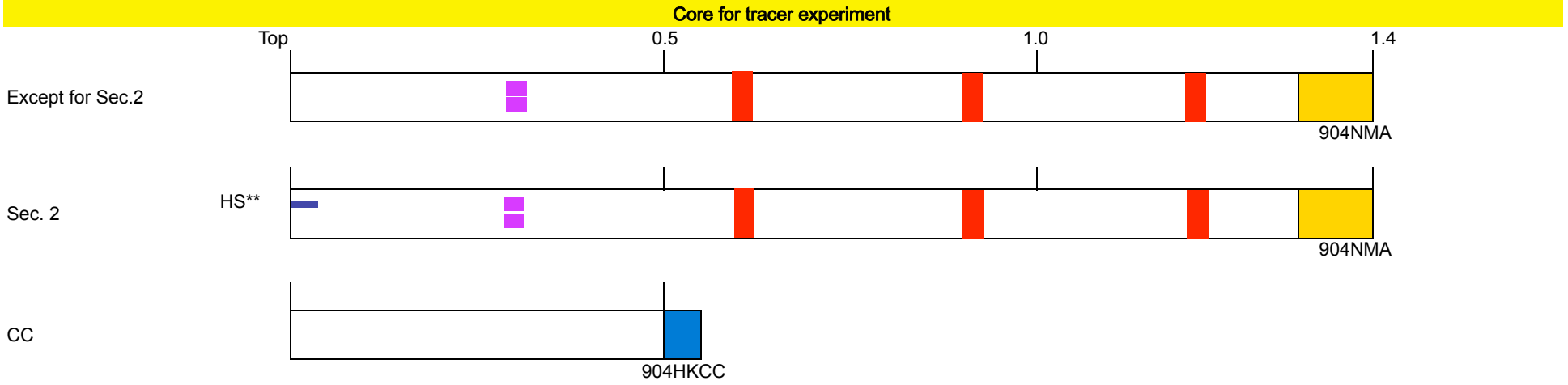
To change sampling position, ask Curator before doing that.
To take another sample, another Sample Request needs to be approved by Azuma, Director General, CDEX. Contact EPM.

Exp.904 Sampling Plan

Hole D



Core for tracer experiment



Whole Round Sample	904NMA : 10 cm WR sample after CT scan ***Take samples from all sections if beads set on core barrel** 904NMB : 10 cm WR sample before CT scan 904HKCC : PAL like sample 5 cm WR sample, 175 cc from bottom of CC HS : 4 cm long sylinge sample, 5 cc ****From core 5X to deeper cores**
Discrete samples	904HKMH : 2 cm long half round core sample, 20 cc, 3 sample / section 904HKMC : 2 cm Cubed sample, 14 cc, 2 samples / section

To change sampling position, ask Curator before doing that.
To take another sample, another Sample Request needs to be approved by Azuma, Director General, CDEX. Contact EPM.

Fig. 6-1: Core processing flow.

Expedition 904 Core Flow

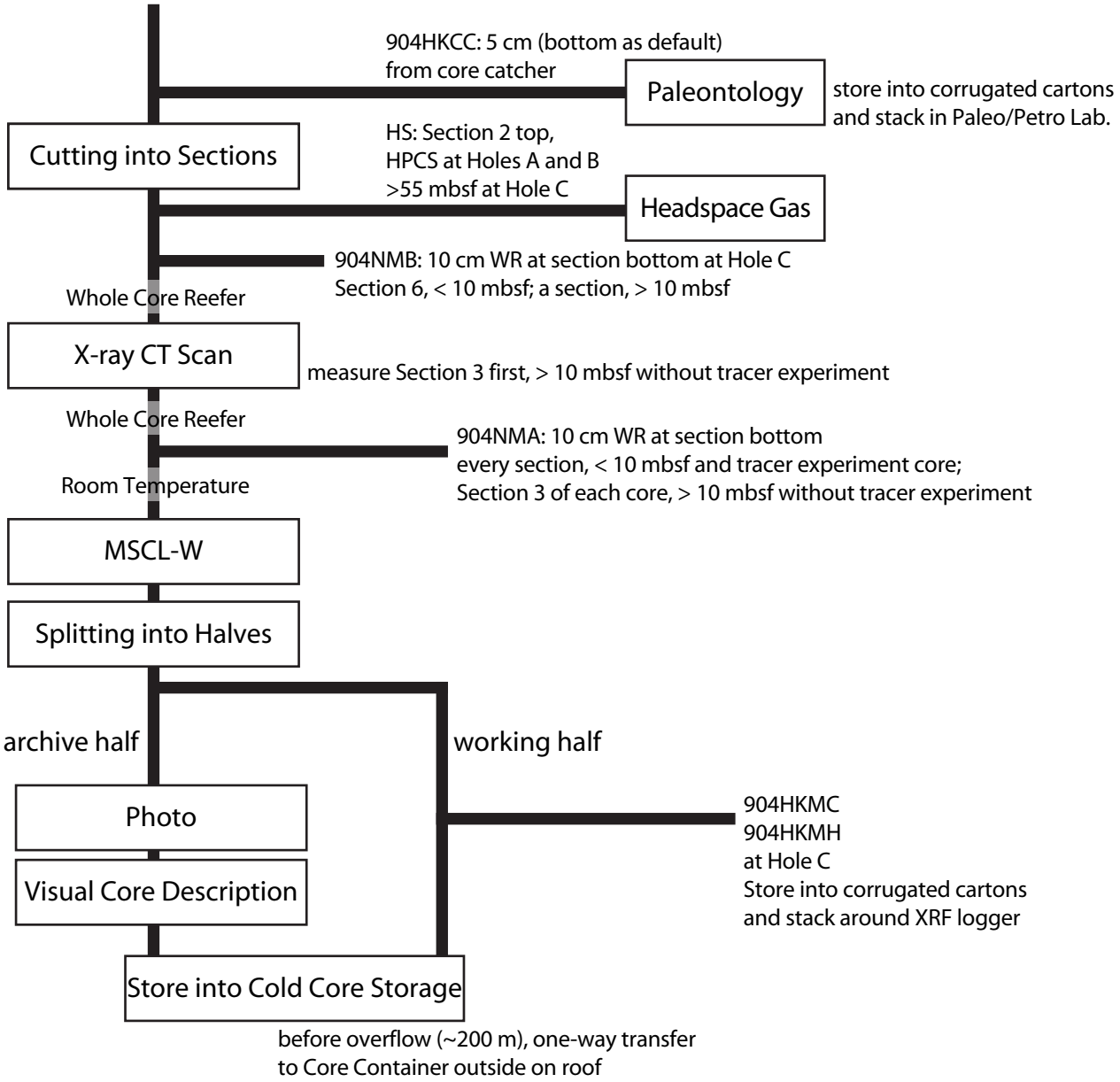
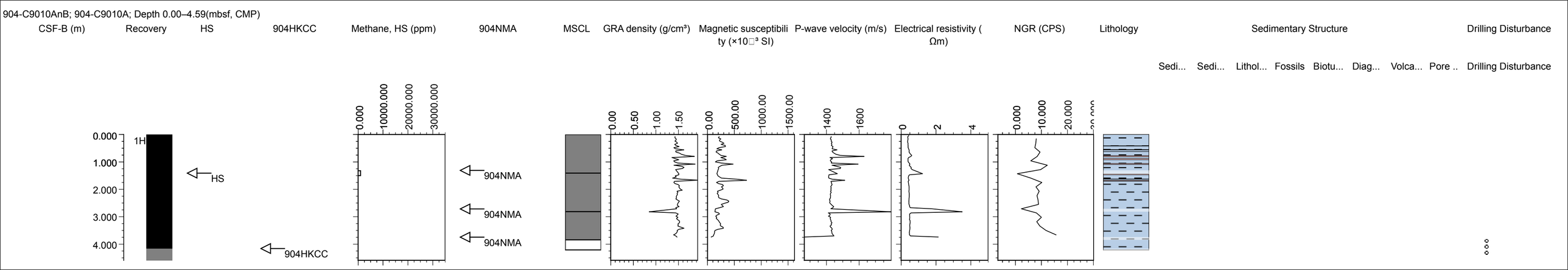
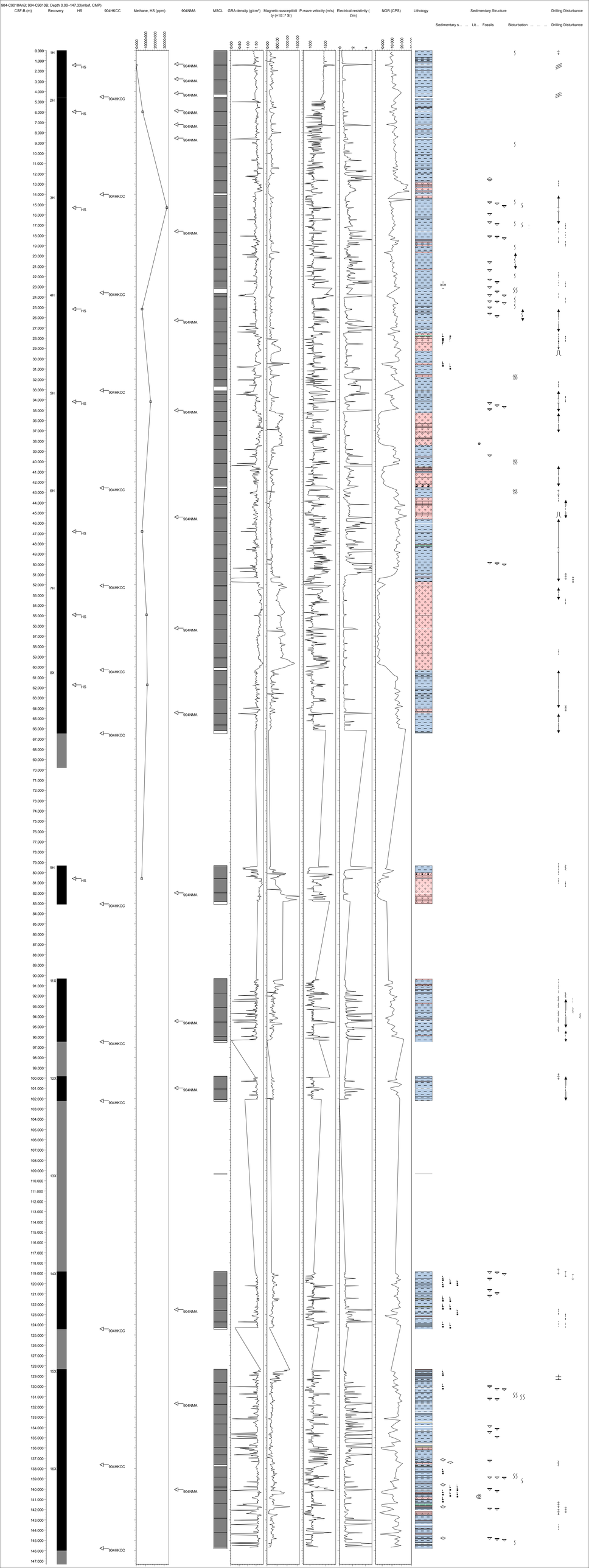
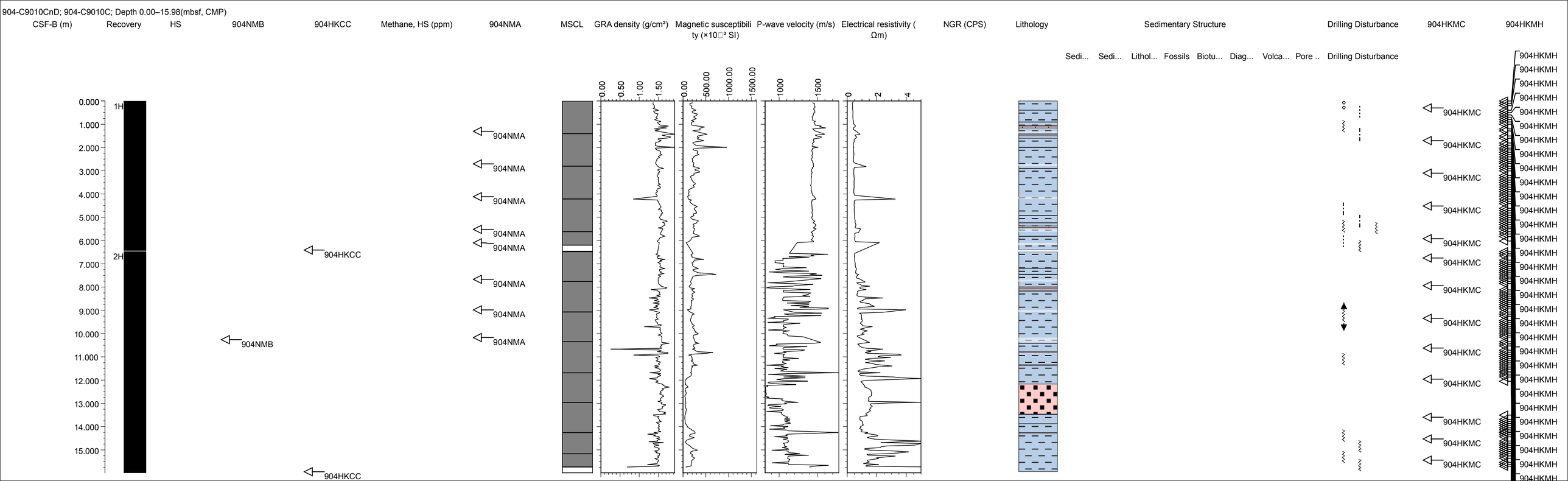


Fig. 6-2: Stratigraphic changes in various parameters at Holes 904-C9010A, B, C and D: Core recovery, sampling horizons of headspace gas analyses (HS) and palaeontology (904HKMCC), methane concentration in headspace gases (ppm), sampling horizons for routine microbiological sampling (RMS; 904NMB and 904NMA), gamma ray attenuation density (g/cm^3), magnetic susceptibility ($\times 10^{-3}$ SI), P-wave velocity (m/s), electrical resistivity (Ωm) and natural gamma radiation (CPS) measured by using a Multi Sensor Core Logger (MSCL), lithology, sedimentary structures and drilling disturbances observed in split core section halves, and sampling horizons for age-modelling (904HKMC and 904HKMH).


904-C9010AnB; 904-C9010A; Depth 0.00–4.59(mbsf, CMP)
CSF-B (m)
Recovery
HS
904HKCC
Methane, HS (ppm)
904NMA
MSCL
GRA density (g/cm³)
Magnetic susceptibility (×10□⁻³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR (CPS)
Lithology
Sedimentary Structure
Drilling Disturbance
Sedi...
Sedi...
Lithol...
Fossils
Biotu...
Diag...
Volca...
Pore ..
Drilling Disturbance
0.000
1.000
2.000
3.000
4.000
1H
HS
904HKCC
0.000
10000.000
20000.000
30000.000
904NMA
904NMA
904NMA
0.00
0.50
1.00
1.50
0.00
500.00
1000.00
1500.00
1400
1600
0
2
4
0.000
10.000
20.000

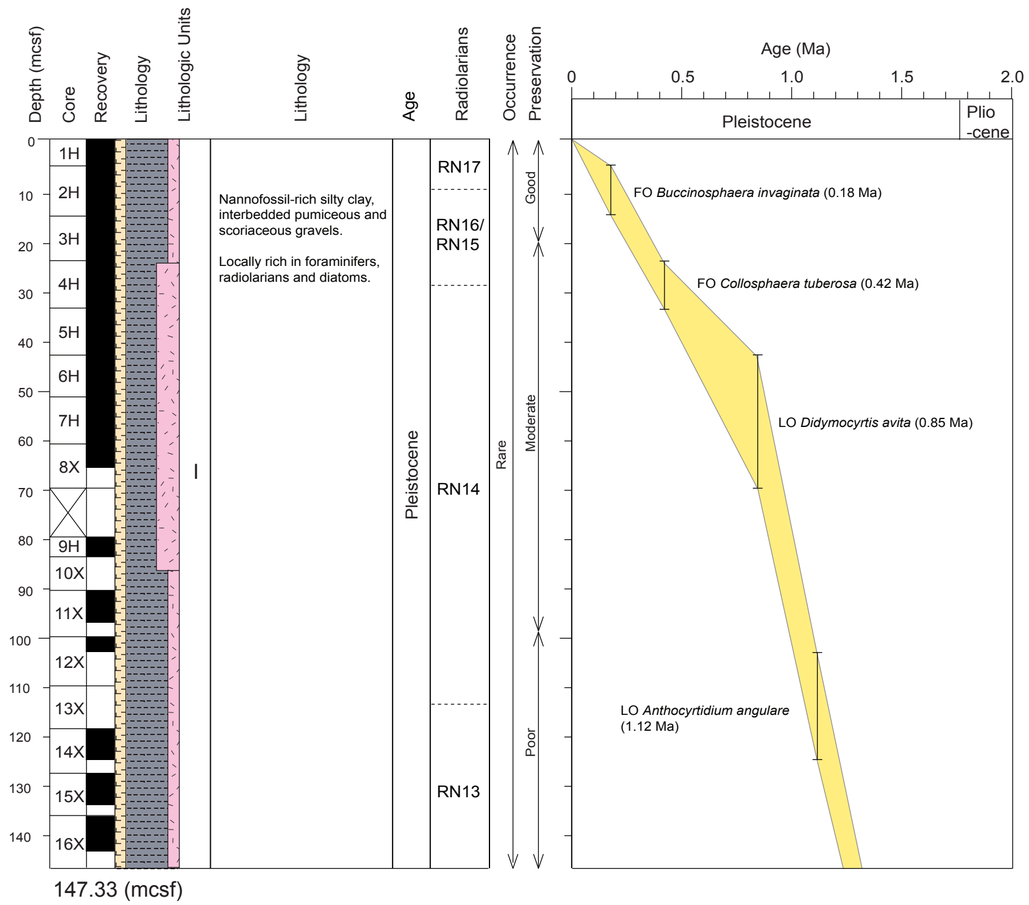

904-C9010AnB; 904-C9010B; Depth 0.00–147.33(mbsf, CMP)
CSF-B (m)
Recovery
HS
904HKCC
Methane, HS (ppm)
904NMA
MSCL
GRA density (g/cm³)
Magnetic susceptibili ty (×10⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR (CPS)
Lithology
Sedimentary Structure
Sedimentary s...
Lit...
Fossils
Bioturbation
Drilling Disturbance
1H
2H
3H
4H
5H
6H
7H
8X
9H
11X
12X
13X
14X
15X
16X


904-C9010CnD; 904-C9010C; Depth 0.00–15.98(mbsf, CMP)
CSF-B (m)
Recovery
HS
904NMB
904HKCC
Methane, HS (ppm)
904NMA
MSCL
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR (CPS)
Lithology
Sedimentary Structure
Sedi...
Sedi...
Lithol...
Fossils
Biotu...
Diag...
Volca...
Pore ..
Drilling Disturbance
Drilling Disturbance
904HKMC
904HKMH
0.000
1.000
2.000
3.000
4.000
5.000
6.000
7.000
8.000
9.000
10.000
11.000
12.000
13.000
14.000
15.000
1H
2H
0.00
0.50
1.00
1.50
0.00
500.00
1000.00
1500.00
1000
1500
0
2
4

904-C9010CnD; 904-C9010D; Depth 14.98–293.48(mbsf, CMP)

Fig. 6-1-1: Summary of lithology, radiolarian events, and sedimentation rates at Site C9010 in the middle latitude of the Northwest Pacific Ocean.

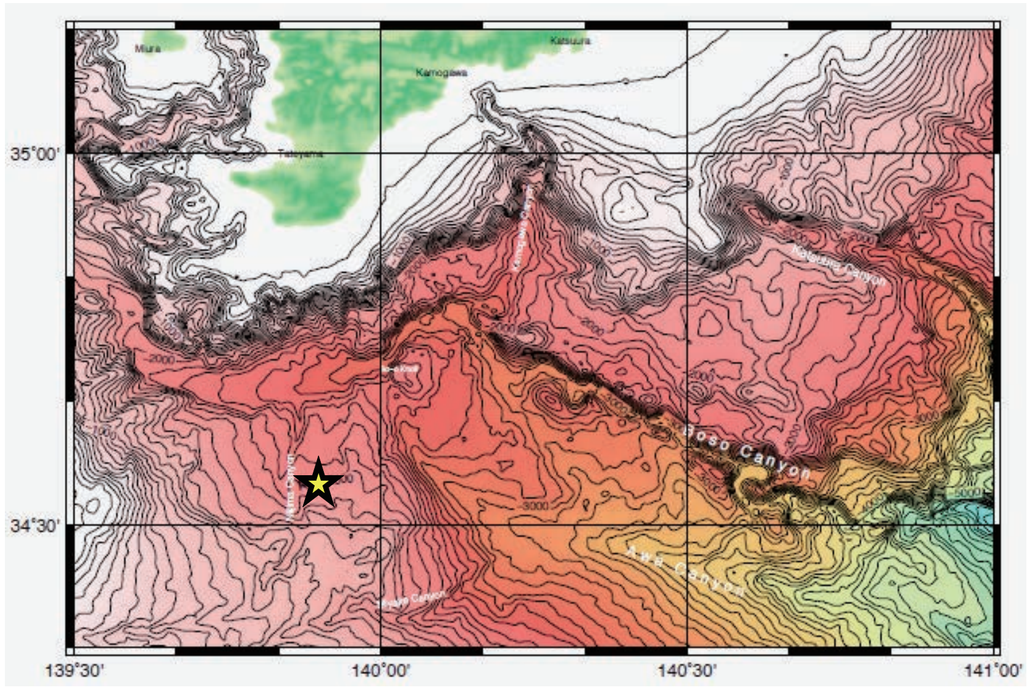
Hole C9010B



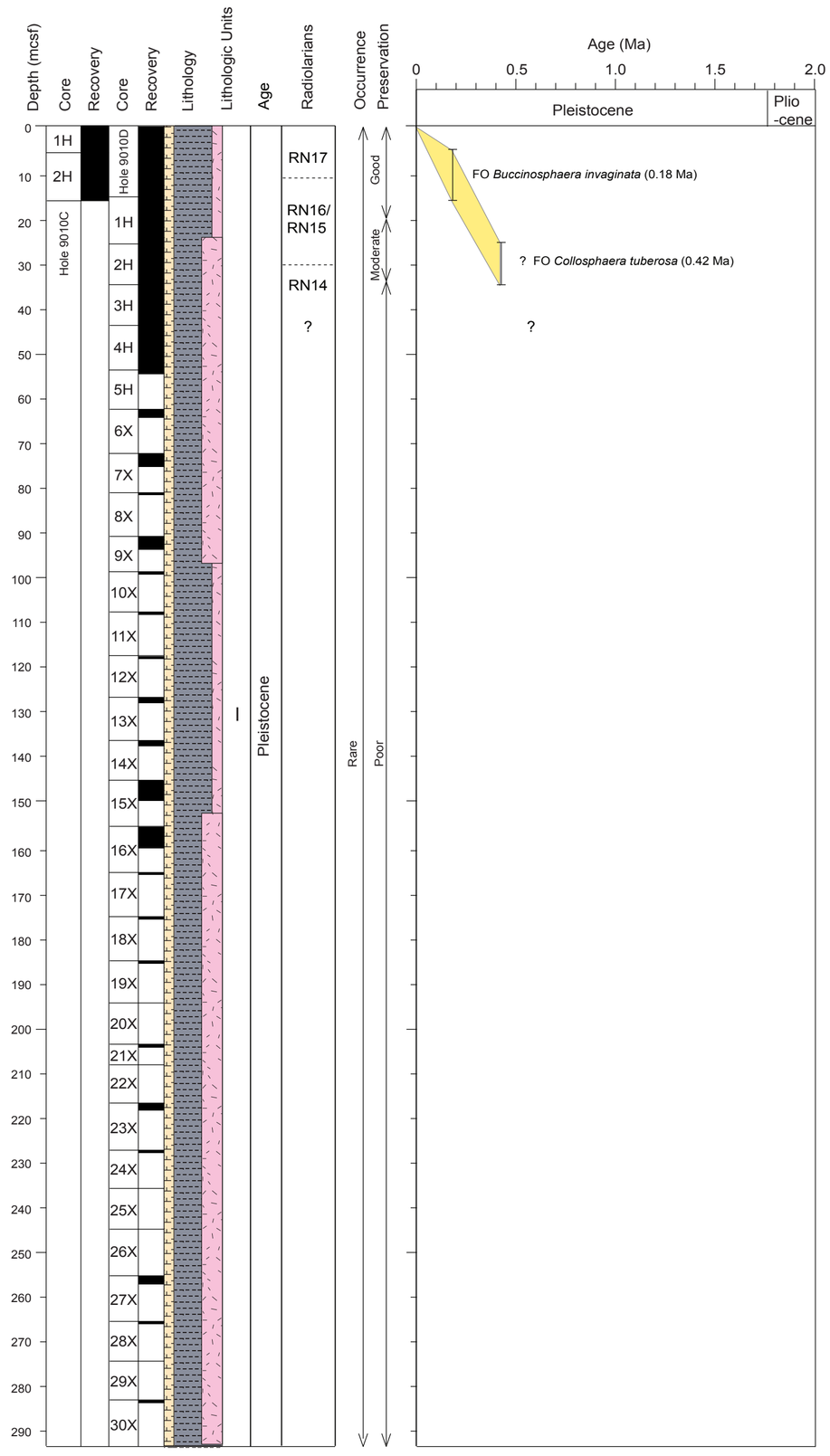
147.33 (mcsf)

Legend

- Nannofossil ooze
- Silty clay/Clay
- Volcanish ash



Hole C9010C, D



293.48 (mcsf)

Fig. 6-2-1: Stratigraphic changes in methane concentration (ppm) in headspace gas at Holes 904-C9010A, B and D.

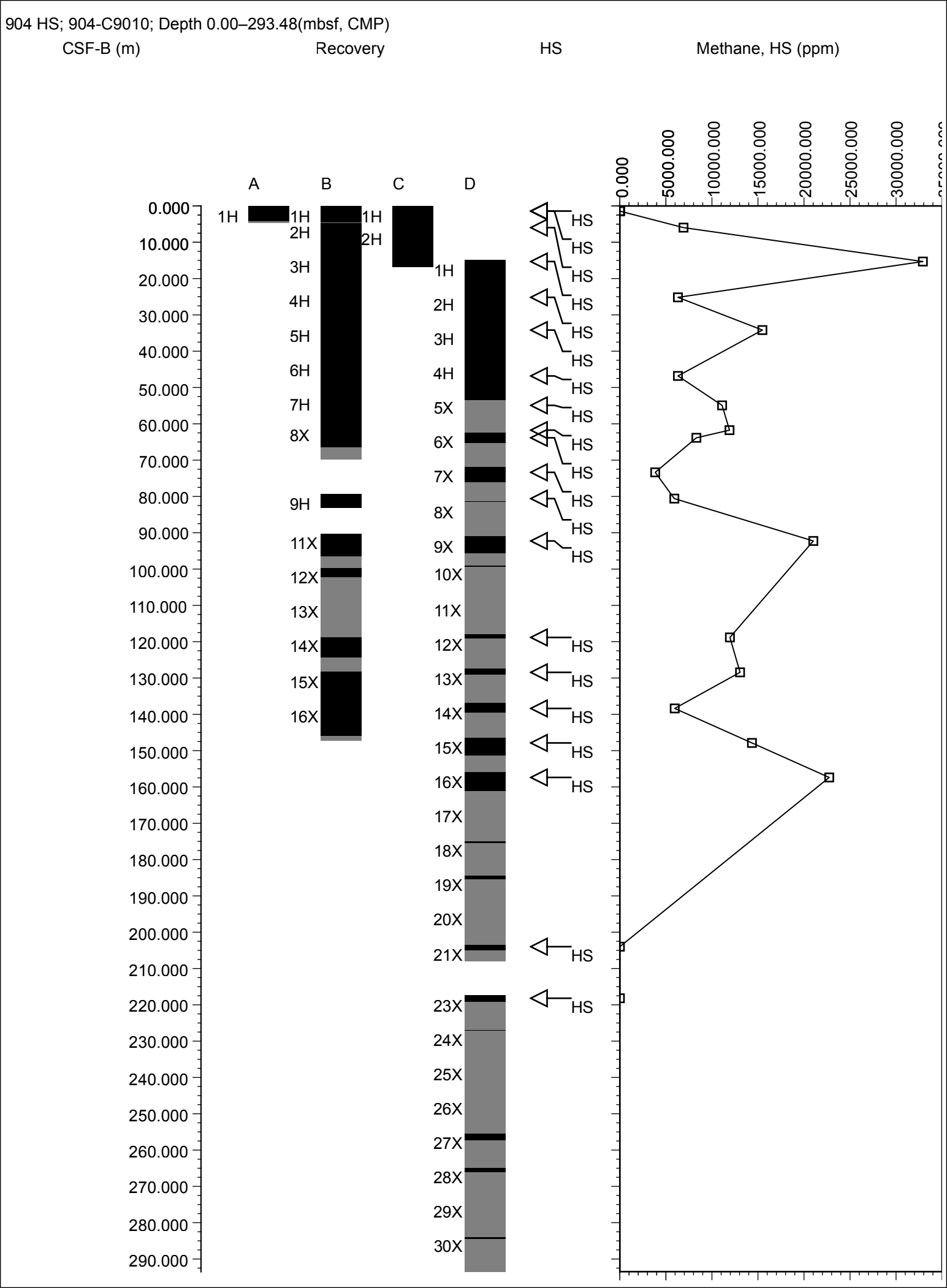

904 HS; 904-C9010; Depth 0.00–293.48(mbsf, CMP)
CSF-B (m)
Recovery
HS
Methane, HS (ppm)
A
B
C
D
0.000
10.000
20.000
30.000
40.000
50.000
60.000
70.000
80.000
90.000
100.000
110.000
120.000
130.000
140.000
150.000
160.000
170.000
180.000
190.000
200.000
210.000
220.000
230.000
240.000
250.000
260.000
270.000
280.000
290.000
1H
2H
3H
4H
5H
6H
7H
8X
9H
11X
12X
13X
14X
15X
16X
5X
6X
7X
8X
9X
10X
11X
12X
13X
14X
15X
16X
17X
18X
19X
20X
21X
23X
24X
25X
26X
27X
28X
29X
30X
HS
0.000
5000.000
10000.000
15000.000
20000.000
25000.000
30000.000

Fig. 6-6-1: (a) Core cutting tools rubbed with alcohol, and autoclaved end-caps, used at Core Cutting Area. (b) Sterilizing latex gloves with rubbing alcohol during sample processing at Core Cutting Area.


clean
white
End Cap
CDEX


FRESH
WATER
Vinyl tape(white)

Fig. 6-6-2: (a, b) Whole round core cutting operated at QA/QC Sampling Room. (c) Samples were sealed and labelled immediately after cutting.


END CAP

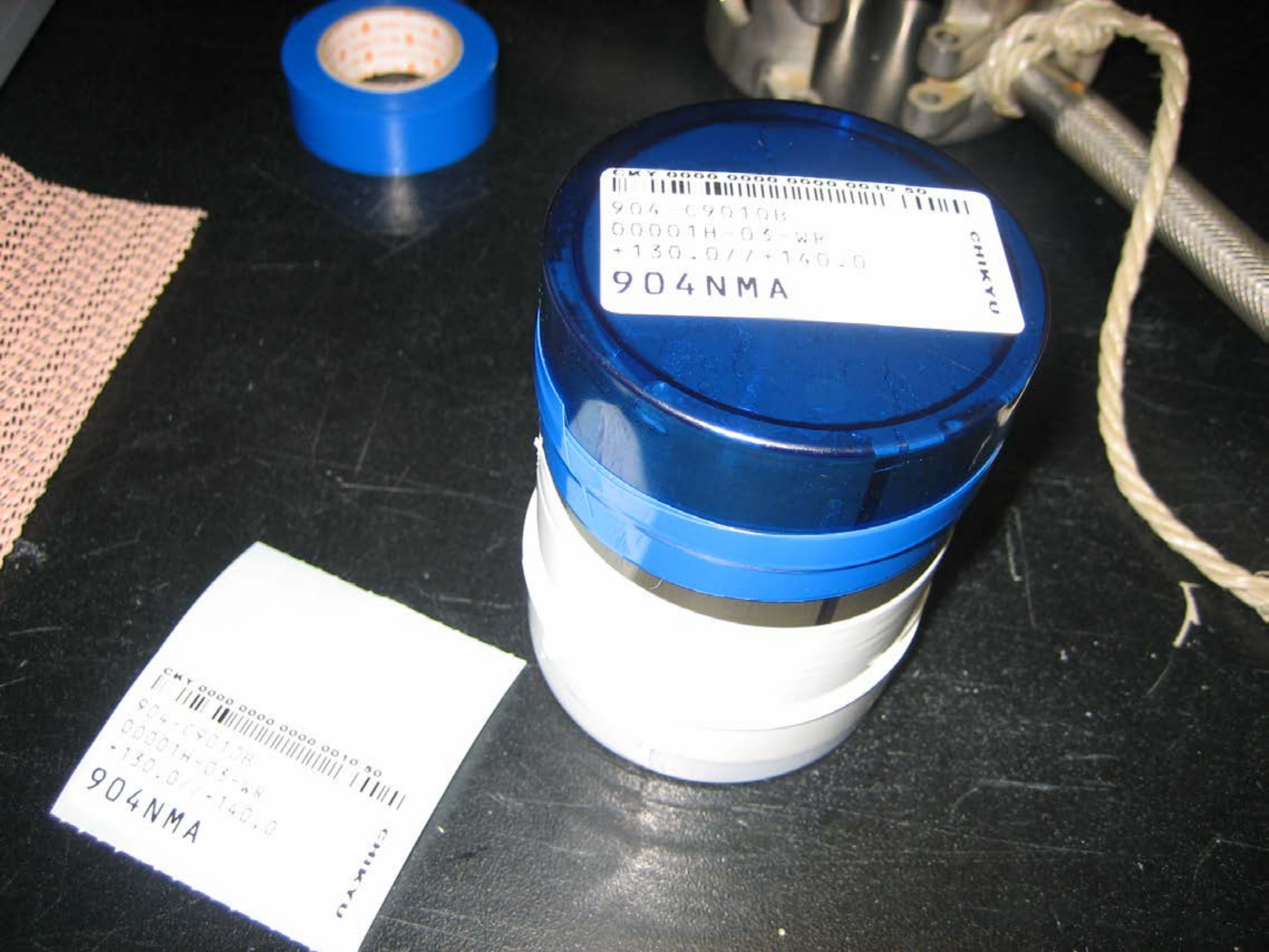

CHY 0000 0000 0000 0010 50
904-C9010B
00001H-03-WP
+130.0//+140.0
904NMA
CHIKYU
CHY 0000 0000 0000 0010 50
904NMA
CHIKYU

Fig. 6-6-3: (a) Samples were put in gas-barrier bags in anaerobic atmosphere. (b) A sample firmly sealed in a gas barrier bag. (c, d) Samples were kept cold with ice gel packs against warm gas filled in the anaerobic work bench.


CHIKYU
904NMA
+130.5//+140.5
00002H-02-WR
904-C9010B
CKY 0000 0000 0000 0014 50
保冷剤


Product by
HiSHiya
Product by
HiSHiya

Fig. 6-6-4: (a) An autoclaved spatula contaminated with tar-like exsolution. (b) Handles of autoclaved spatulas showing variation of exsolution.

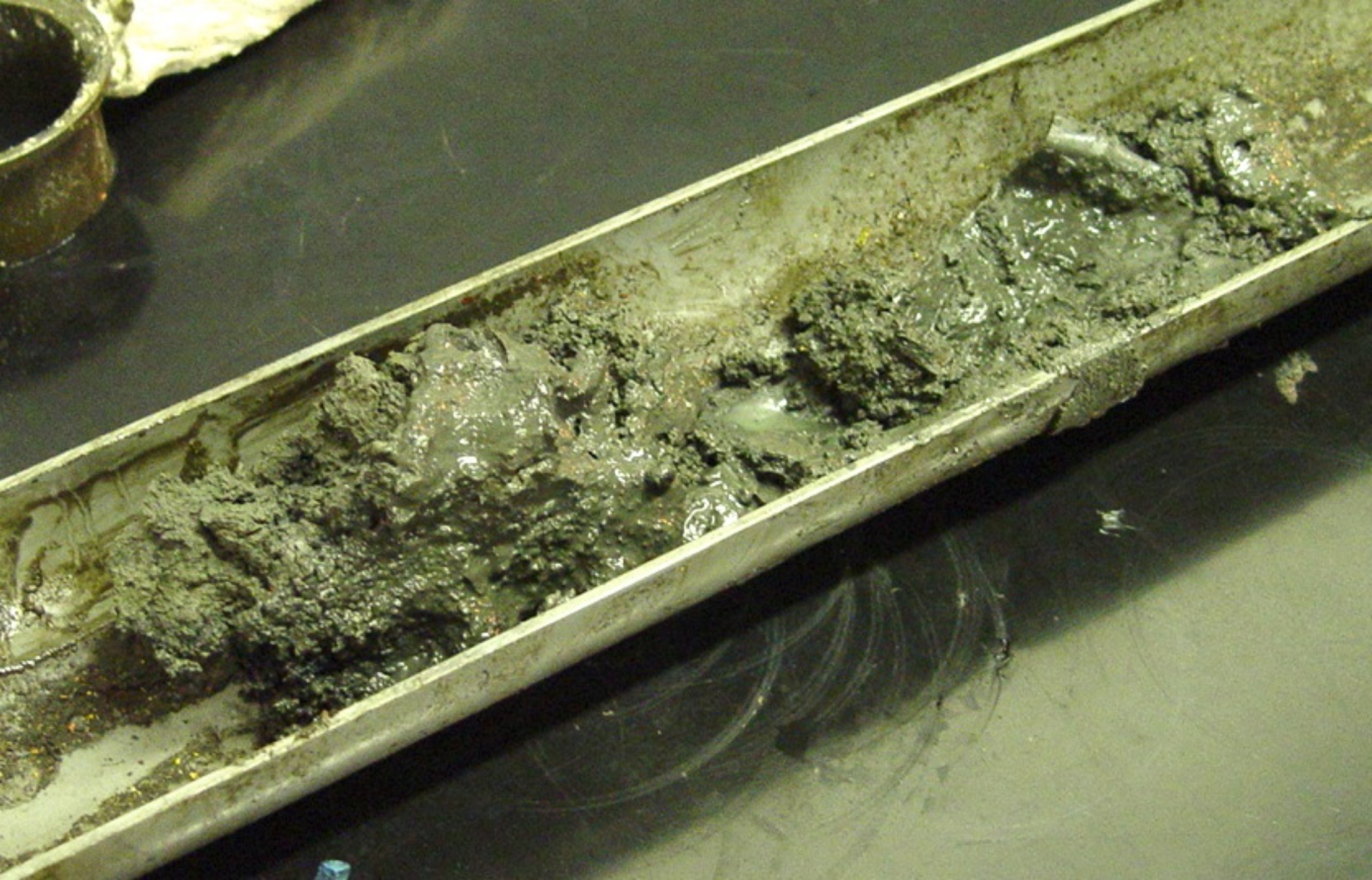

ステンレス
5″
ステンレス
5″
ステンレス
5″

Fig. 6-6-5: (a) End-caps processed with autoclaves. (b) New type end-caps were bended, shrunk and stuck together by autoclaving.

Fig. 6-6-6: (a) A dummy samples storage at -80˚C. (b) A clack was formed on the new type end-cap.

Fig. 6-6-7: Plastic bags containing suspension of fluorescent microspheres, attached on spacer.

Fig. 6-6-8: Broken plastic bag in recovered cores. (a) Above the core liner of Core 3H. (b) Above the core liner of Core 4H. (c) Lower part in the core liner of Core 4H.



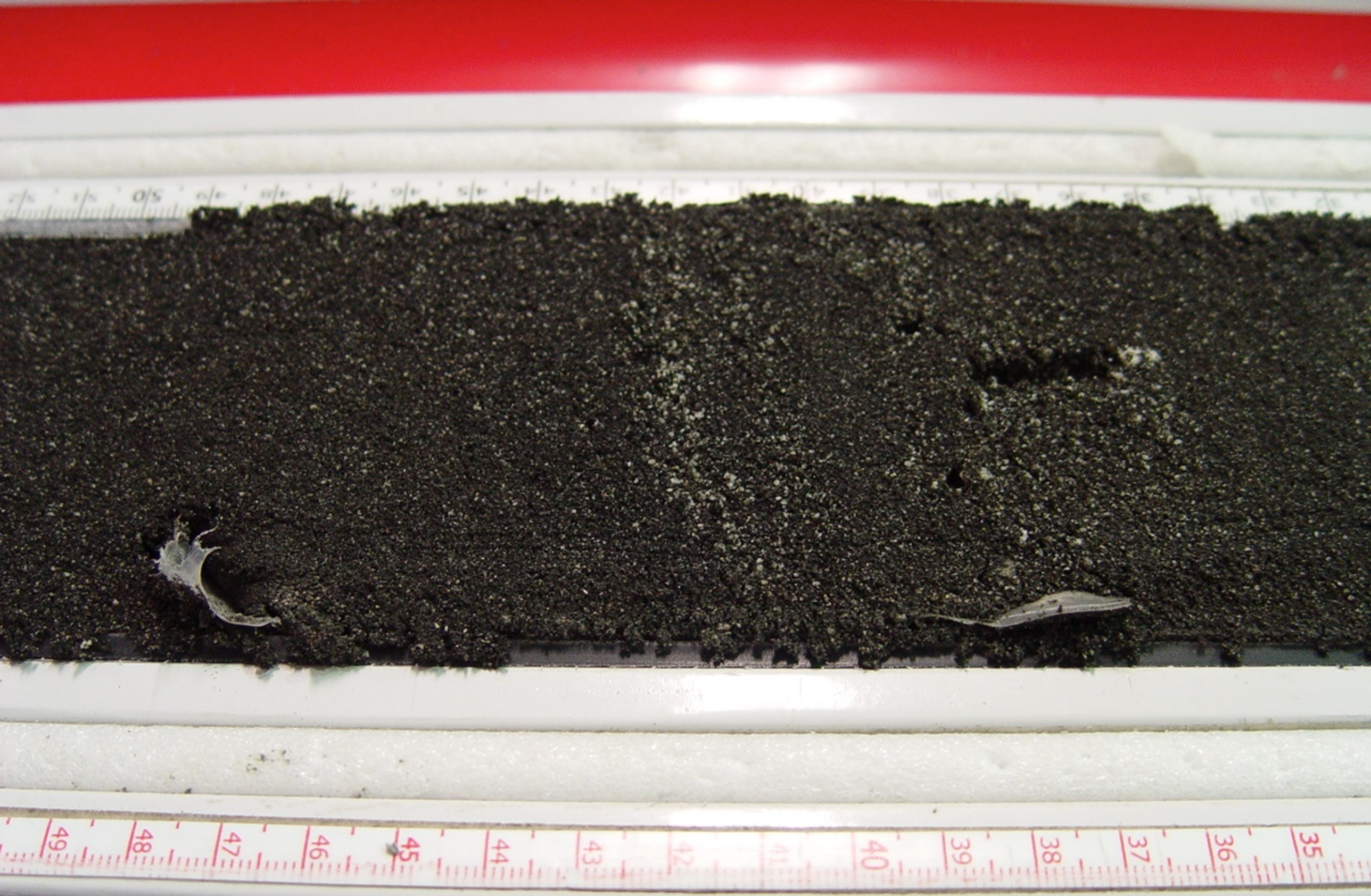


Fig. 6-6-9: Tracer bag that was not broken and remained in the spacer.

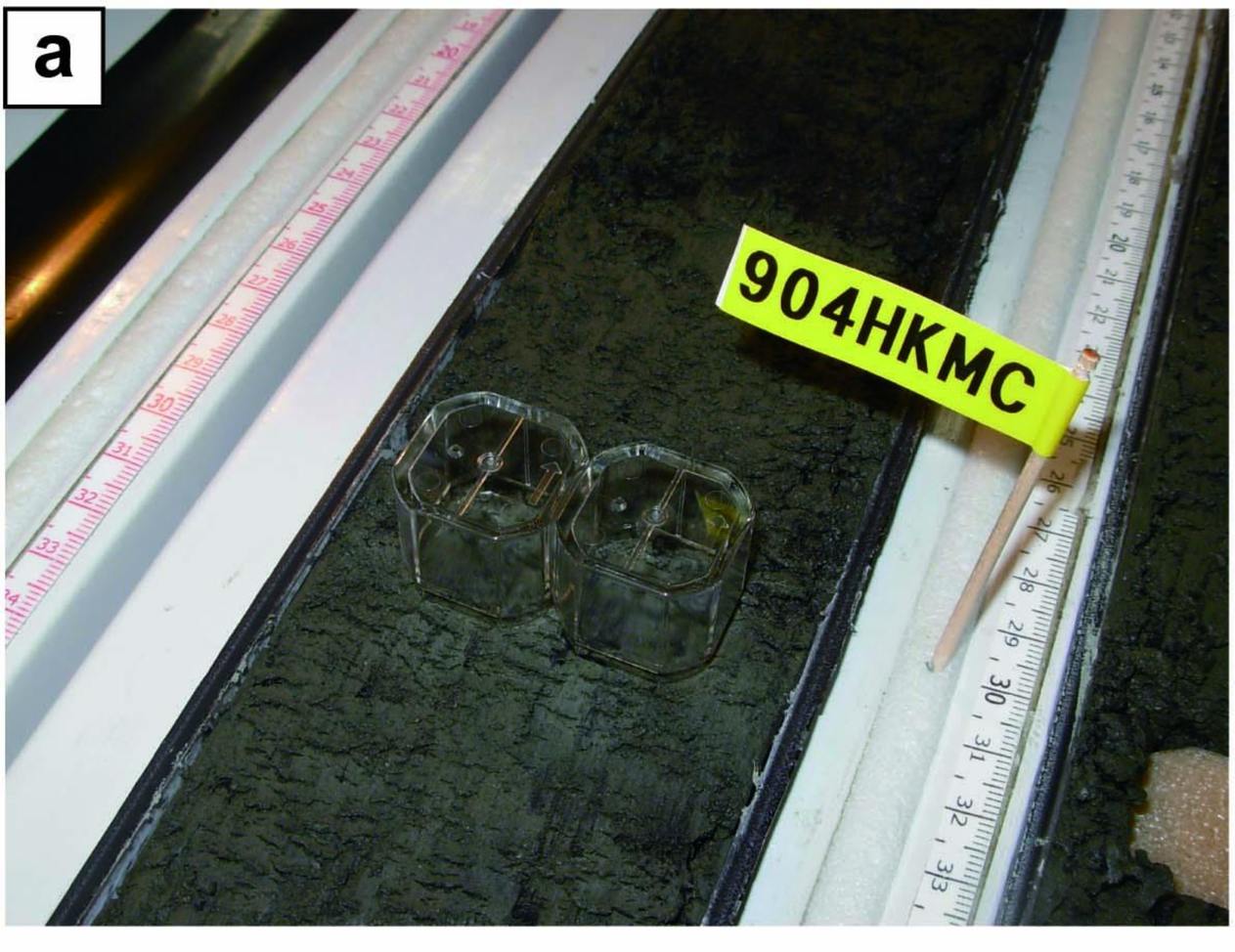
Fig. 6-7-1: 904HKCC: the whole round samples from the core catcher. They were cut out from the recovered core catcher samples (a) and soon packed (b).


a

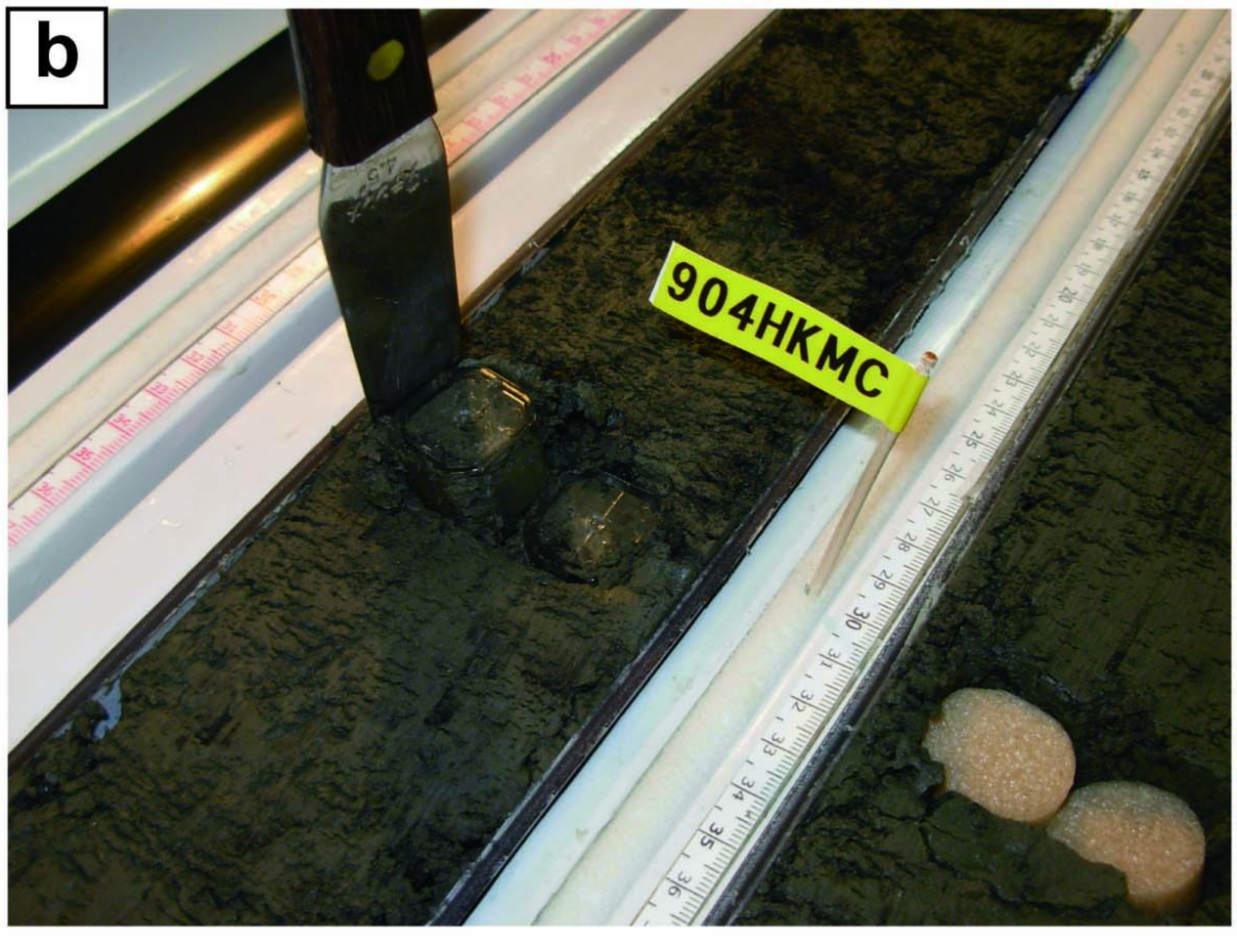

b
904HKCC
ПХ-СС
904-C90100
00007X-CC-WR
+021.0//+026.0
904HKCC

Fig. 6-7-2: 904HKMC: the cubed samples from the working halves. The plastic cubes (a) were plugged in (b, right cube) and out with a hook-like spatula (b, left cube). Each cube was labeled and fully sealed up (c) and zipped (d).

a


904HKMC

b


904HKMC

c

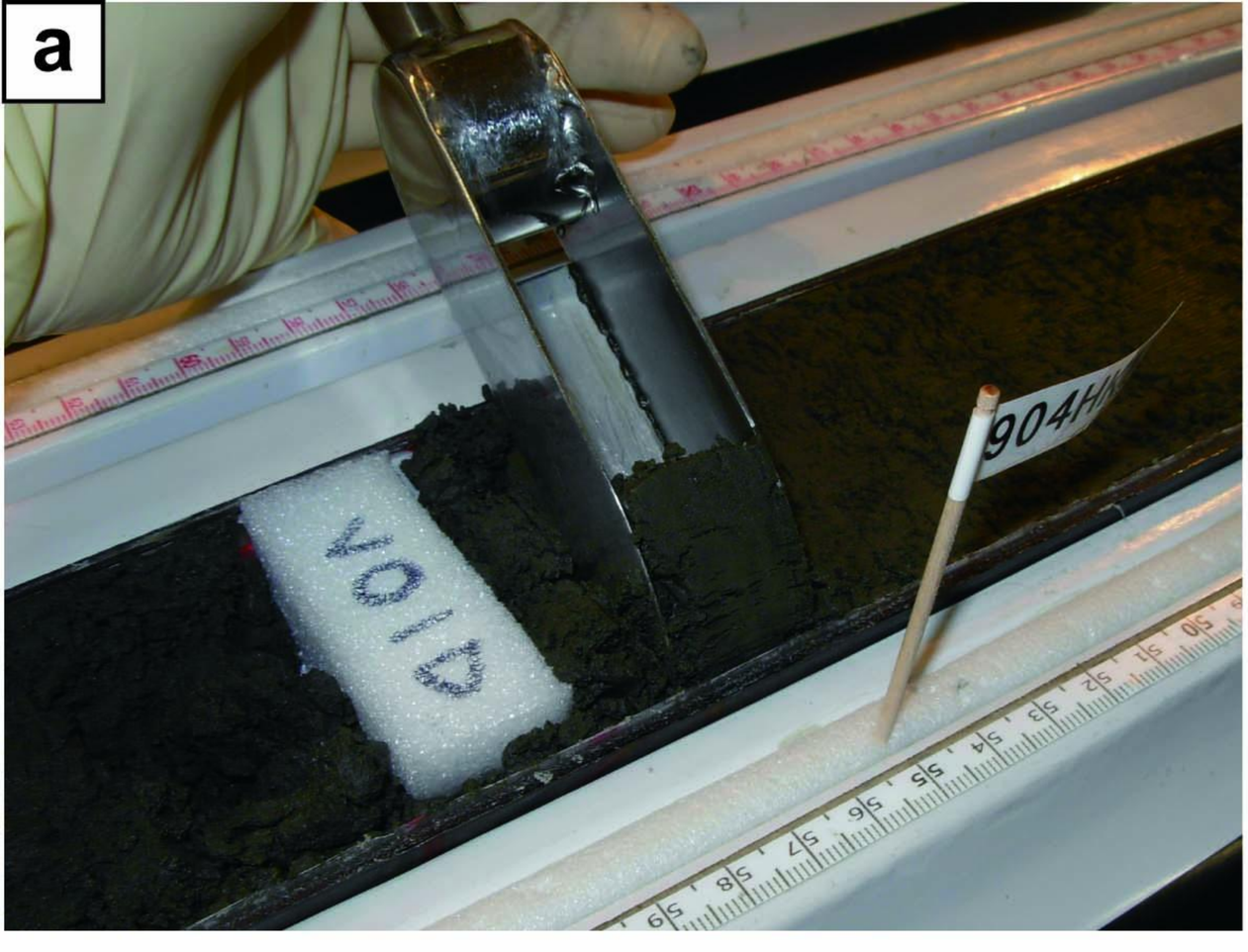

904-C9010
X-
W
904HKMC
/2

d


CKY 0000 0000 0000 0345 60
904-C9010D
00006X-02-WW
+030.0//+032.0
904HKMC
CHINKYO
904-C9010D
6 X- W
30 32
904HKMC
1/2
904-C9010D
6 X-2 W
30 32
904HKMC
2/2

Fig. 6-7-3: 904HKMH: the half round core samples. The samples were taken with a stainless steel scoop for quarter round sampling (a). The rim of the sediments was swept out with a spatula with notches (b and c). These samples were packed in plastic bags (d).

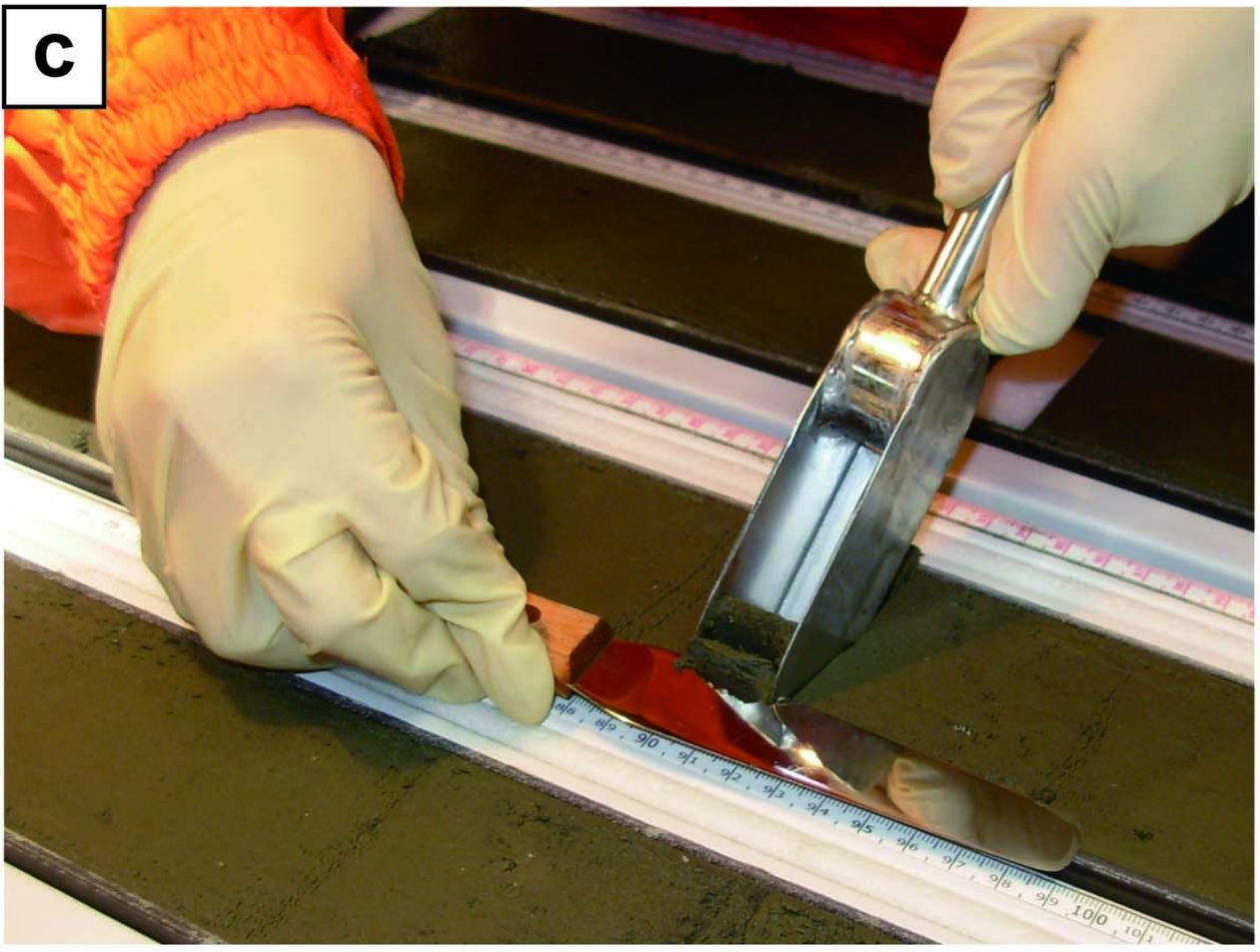
a


void
904H

b


5

c



d


CKY 0000 0000 0000 0373 60
904-C9010D
00012X-01-WW
+055.0//+057.0
904HKMH
CHIKYU

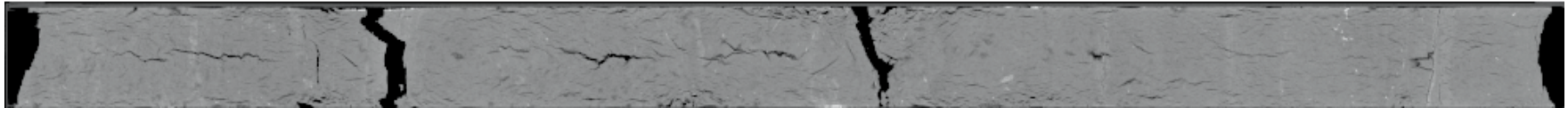
Fig. 7-1: X-ray CT image examples of horizontal cracks (upper) and vertical cracks (lower) observed in silty clay sediments.

C9010B-9H-3 (81.98 - 82.85 m CSF)

Top

Horizontal cracks

C9010B-12X-2 (101.07 – 102.12 m CSF)



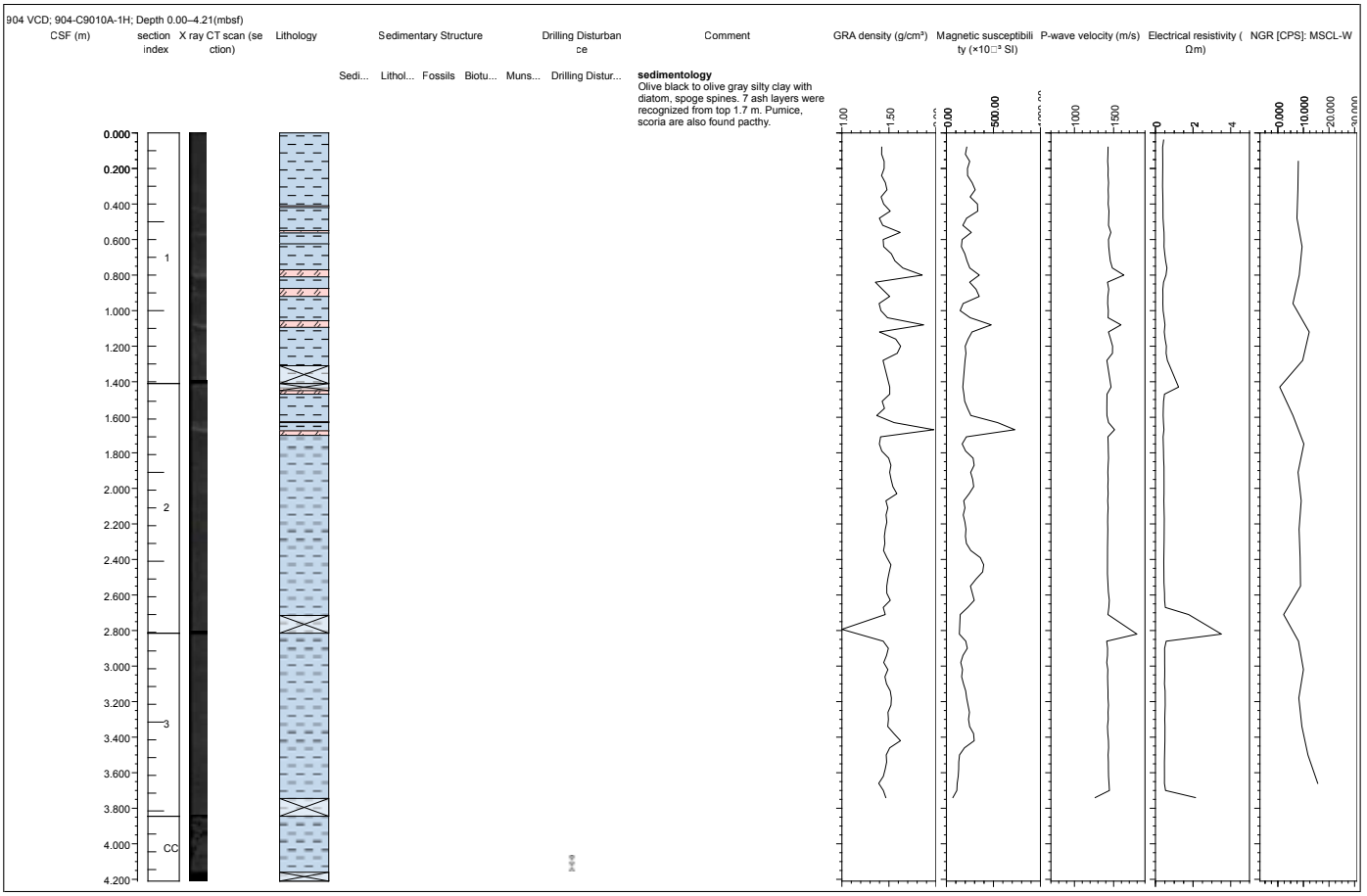
Top

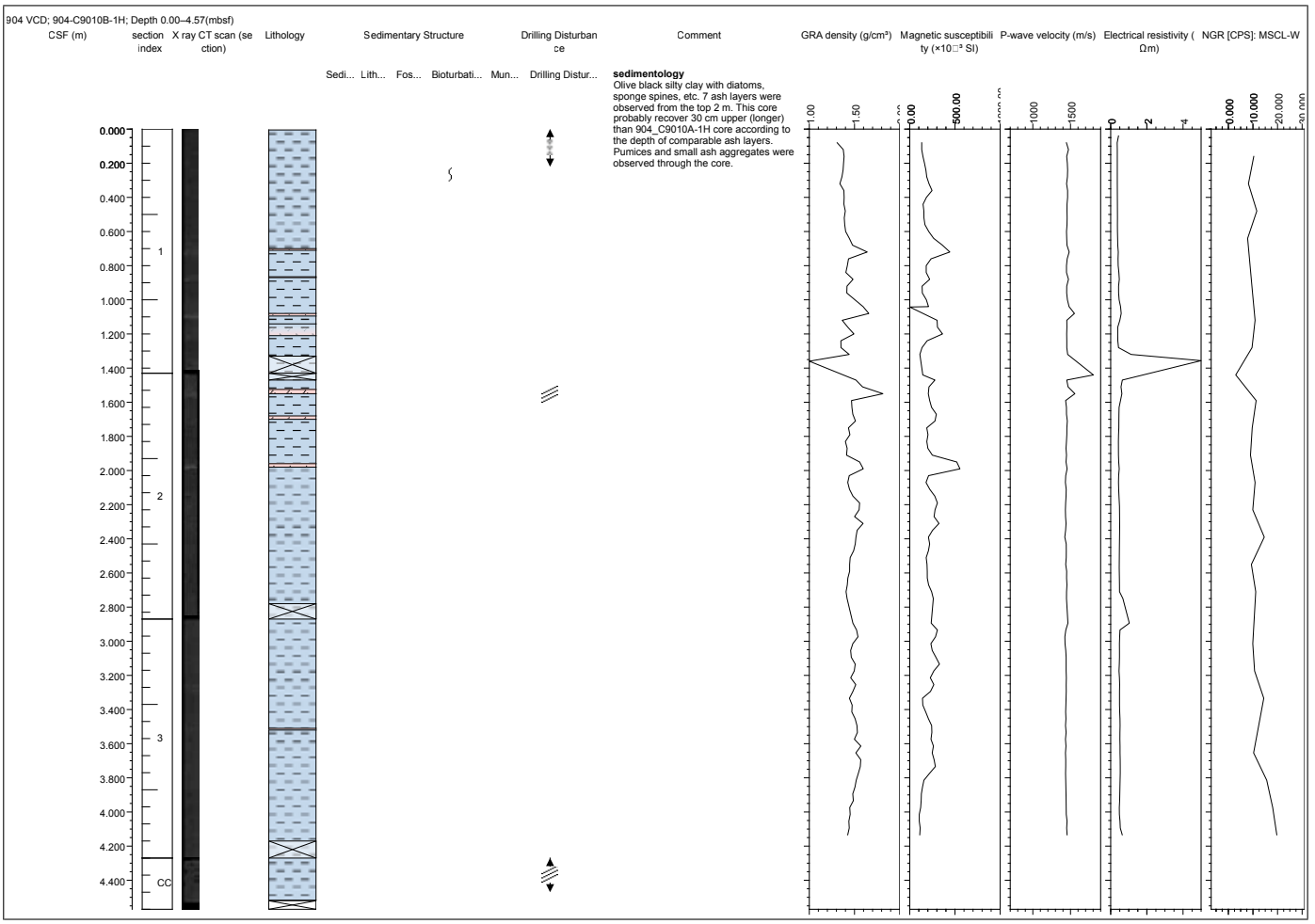
Vertical cracks

Appendices

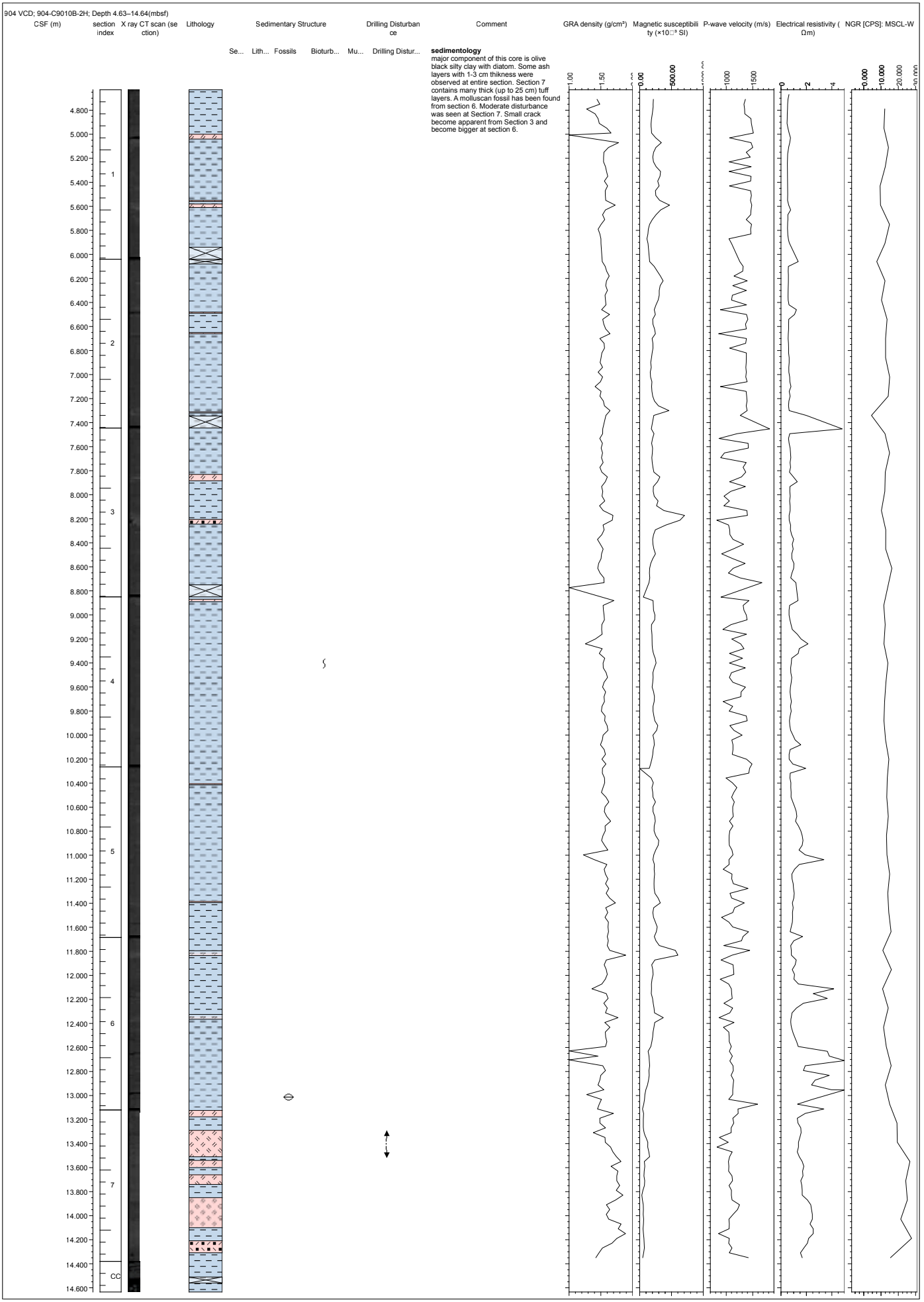
A: Visual core descriptions for each core shown with some physical properties measured by a Multi Sensor Core Logger (MSCL) as well as re-constructed coronal images of X-ray CT scan.

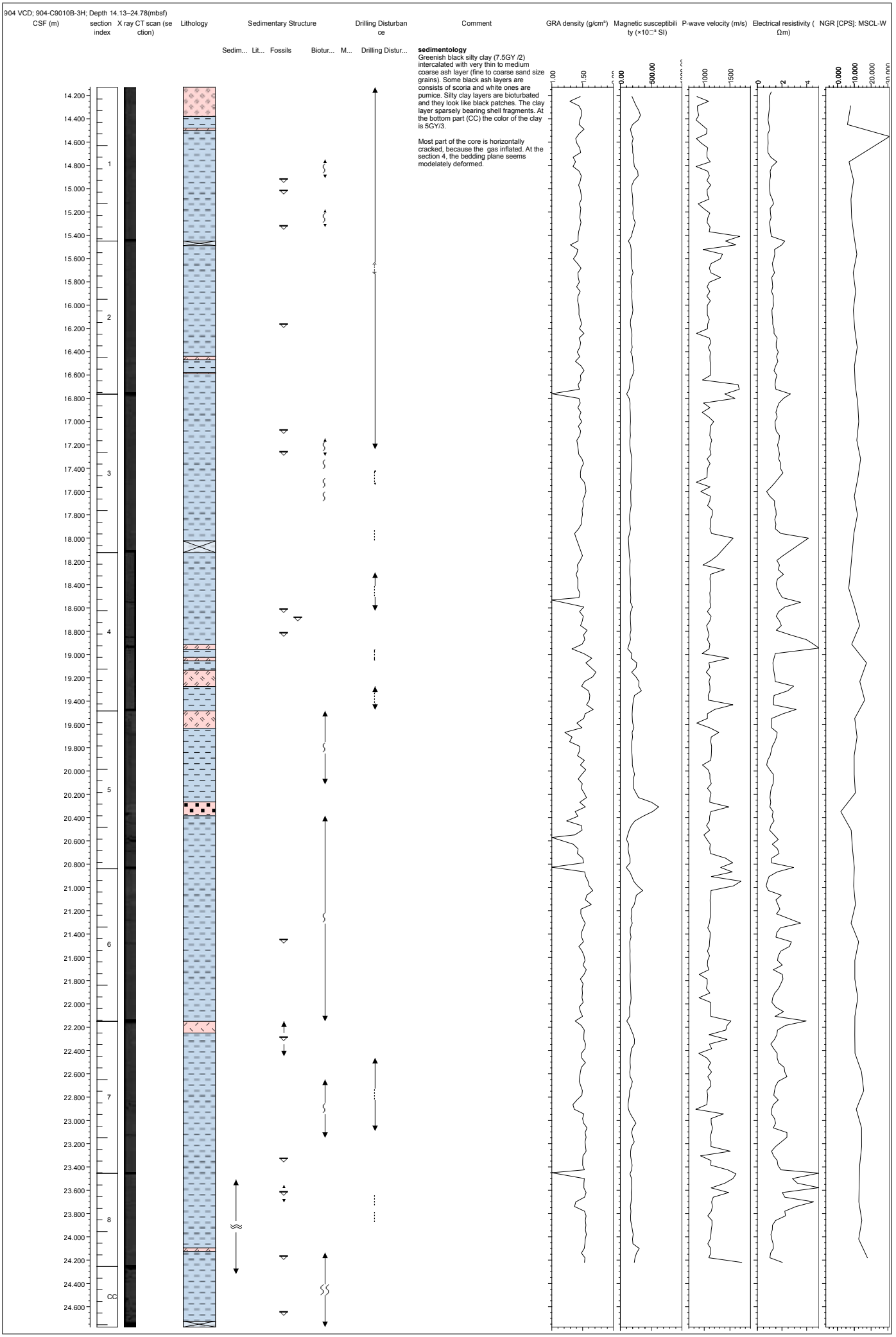
B: Photographs of archive halves of split core sections. Core tops direct to the right side of photographs. Sections are lined up from the bottom to the top of the photographs. The lowest section in each photograph is with its identification label.

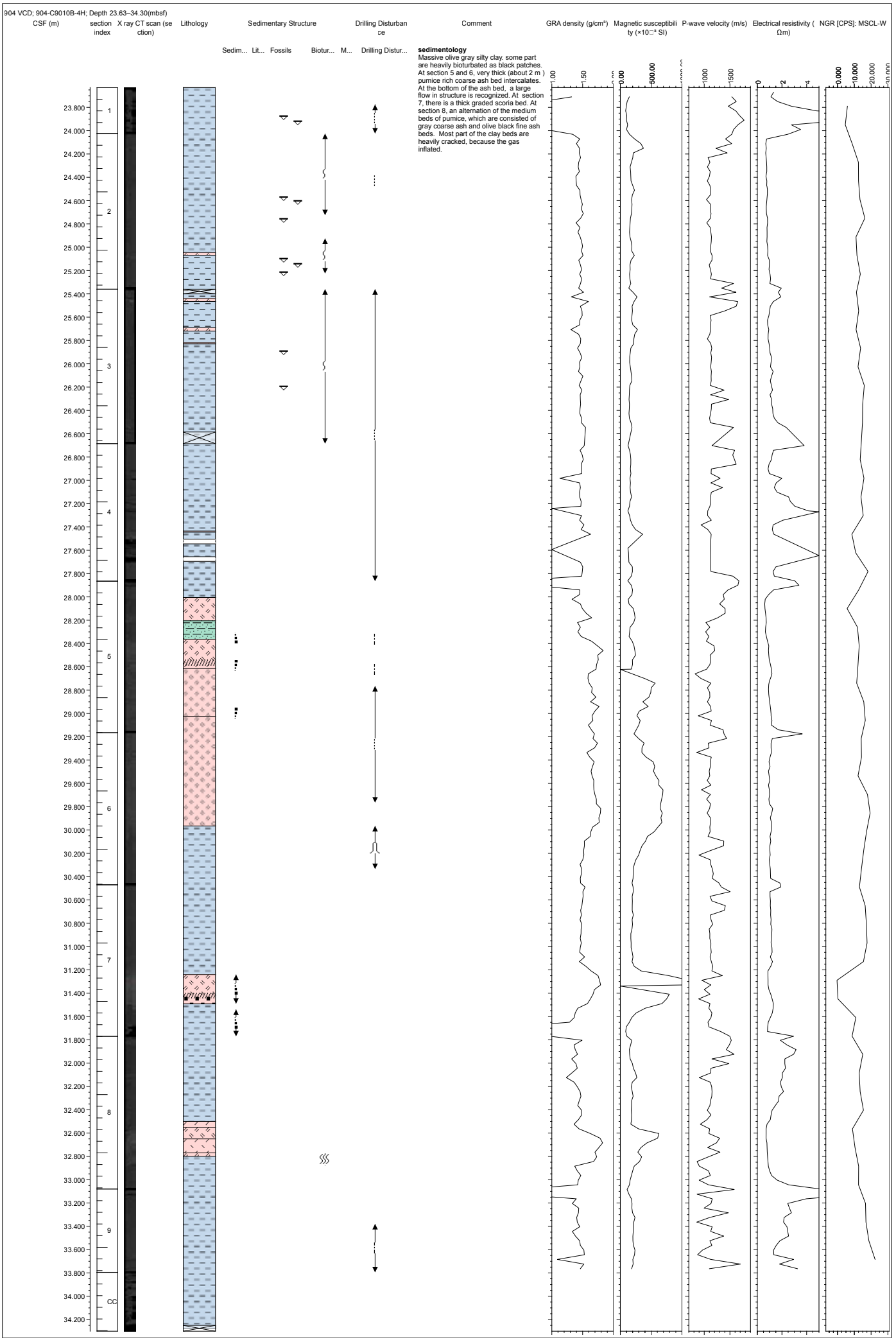

904 VCD; 904-C9010A-1H; Depth 0.00–4.21(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Lithol...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
Olive black to olive gray silty clay with diatom, spoge spines. 7 ash layers were recognized from top 1.7 m. Pumice, scoria are also found pacthy.
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
0.000
0.200
0.400
0.600
0.800
1.000
1.200
1.400
1.600
1.800
2.000
2.200
2.400
2.600
2.800
3.000
3.200
3.400
3.600
3.800
4.000
4.200
1
2
3
CC

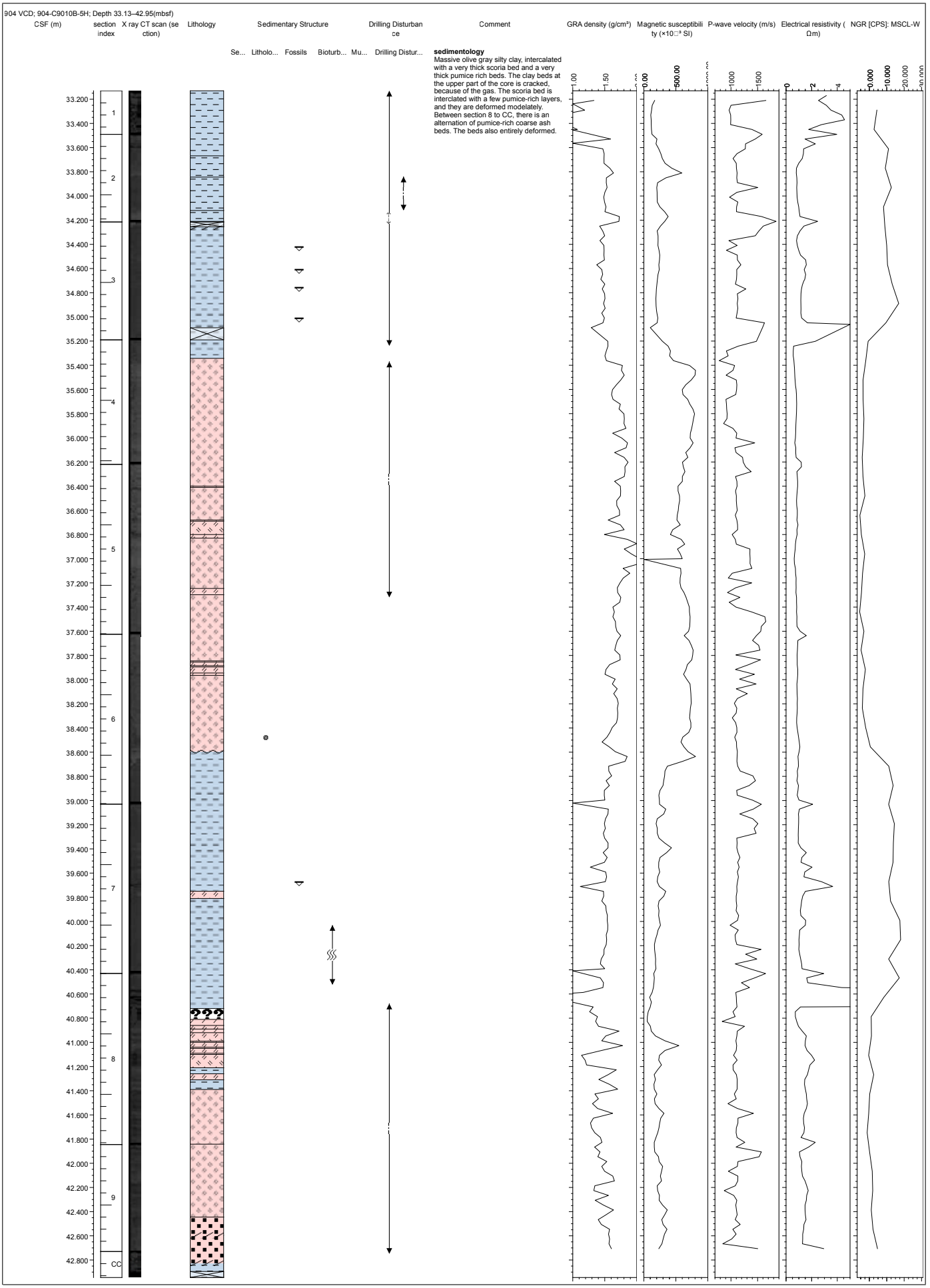

904 VCD; 904-C9010B-1H; Depth 0.00–4.57(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Lith...
Fos...
Bioturbati...
Mun...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
Olive black silty clay with diatoms, sponge spines, etc. 7 ash layers were observed from the top 2 m. This core probably recover 30 cm upper (longer) than 904_C9010A-1H core according to the depth of comparable ash layers. Pumices and small ash aggregates were observed through the core.
GRA density (g/cm³)
Magnetic susceptibility (×10⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
0.000
0.200
0.400
0.600
0.800
1.000
1.200
1.400
1.600
1.800
2.000
2.200
2.400
2.600
2.800
3.000
3.200
3.400
3.600
3.800
4.000
4.200
4.400
1
2
3
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000

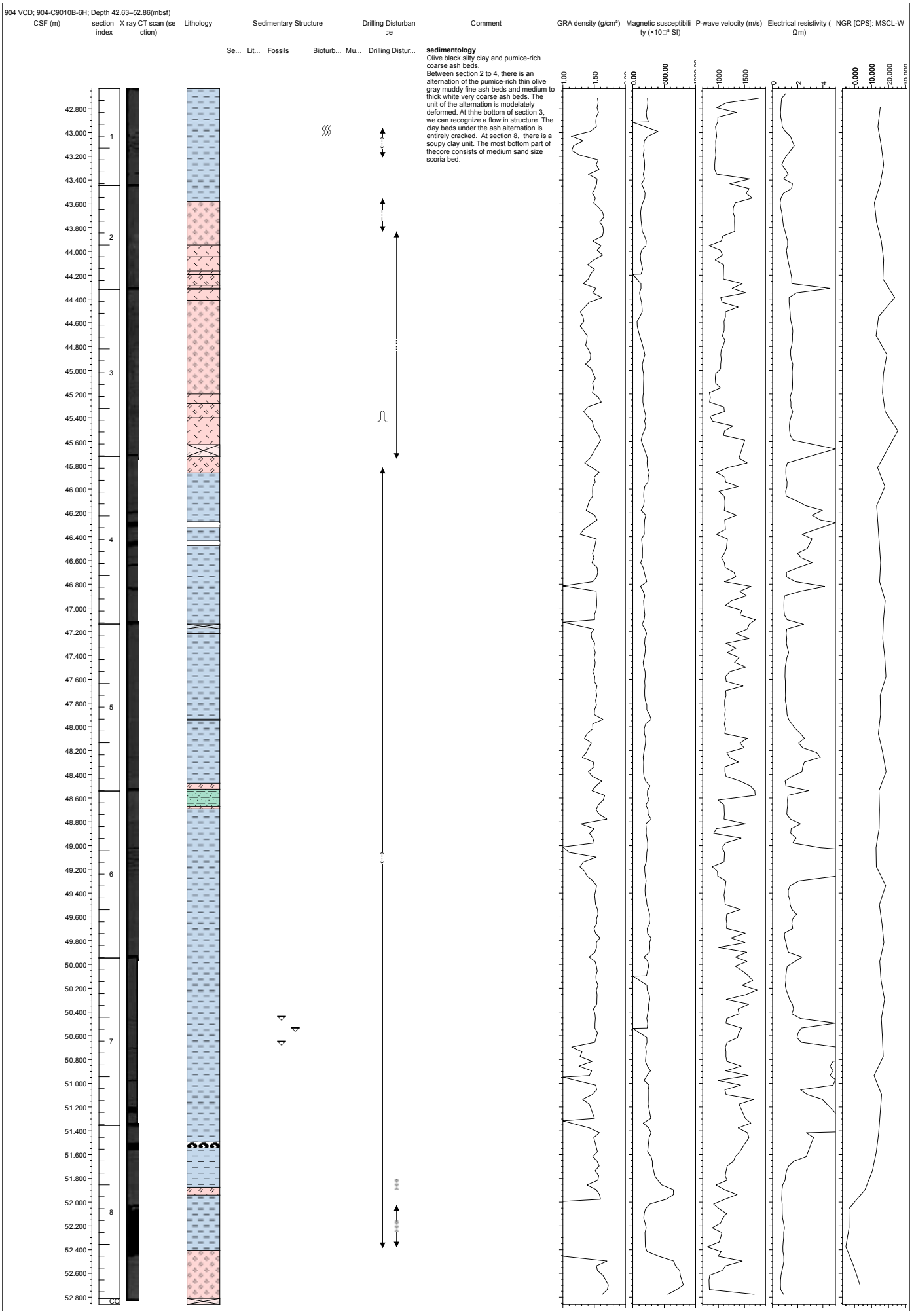
904 VCD; 904-C9010B-2H; Depth 4.63–14.64(mbsf)

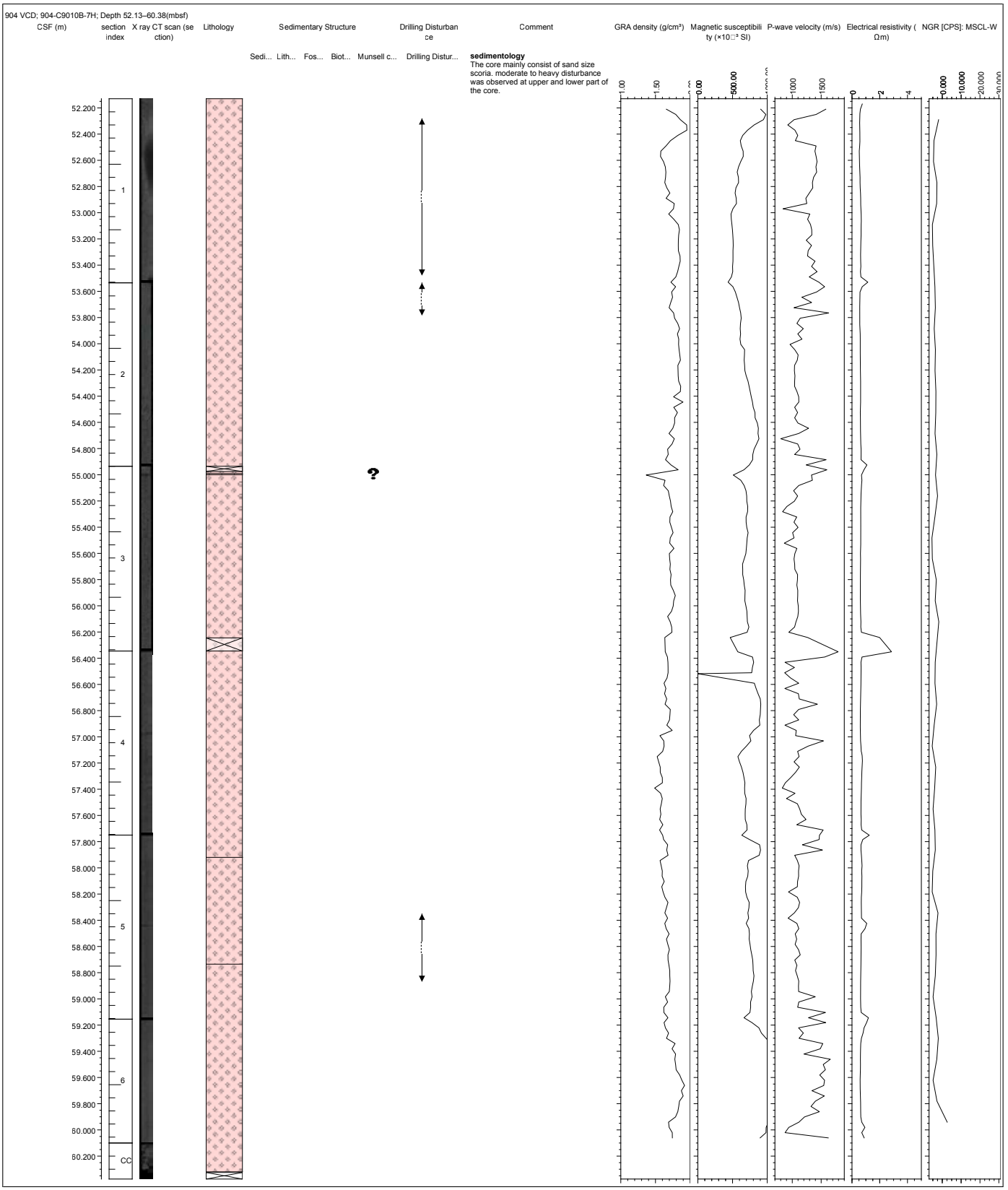



904 VCD; 904-C9010B-3H; Depth 14.13–24.78(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedim...
Lit...
Fossils
Biotur...
M...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
Greenish black silty clay (7.5GY /2) intercalated with very thin to medium coarse ash layer (fine to coarse sand size grains). Some black ash layers are consists of scoria and white ones are pumice. Silty clay layers are bioturbated and they look like black patches. The clay layer sparsely bearing shell fragments. At the bottom part (CC) the color of the clay is 5GY/3.
Most part of the core is horizontally cracked, because the gas inflated. At the section 4, the bedding plane seems modelately deformed.
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
14.200
14.400
14.600
14.800
15.000
15.200
15.400
15.600
15.800
16.000
16.200
16.400
16.600
16.800
17.000
17.200
17.400
17.600
17.800
18.000
18.200
18.400
18.600
18.800
19.000
19.200
19.400
19.600
19.800
20.000
20.200
20.400
20.600
20.800
21.000
21.200
21.400
21.600
21.800
22.000
22.200
22.400
22.600
22.800
23.000
23.200
23.400
23.600
23.800
24.000
24.200
24.400
24.600
1
2
3
4
5
6
7
8
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
0.000
10.000
20.000

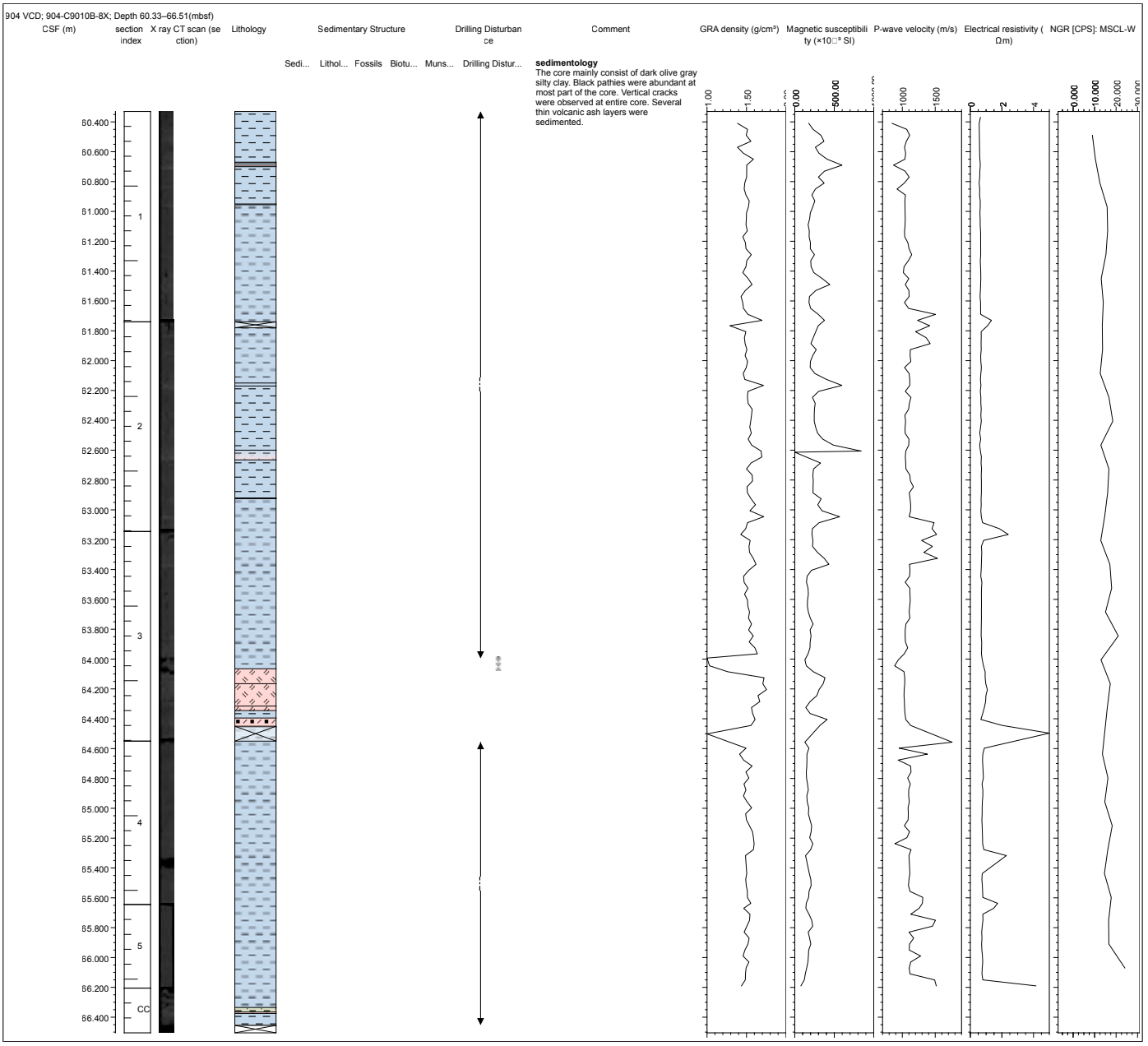

904 VCD; 904-C9010B-4H; Depth 23.63–34.30(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedim...
Lit...
Fossils
Biotur...
M...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
Massive olive gray silty clay. some part are heavily bioturbated as black patches. At section 5 and 6, very thick (about 2 m) pumice rich coarse ash bed intercalates. At the bottom of the ash bed, a large flow in structure is recognized. At section 7, there is a thick graded scoria bed. At section 8, an alternation of the medium beds of pumice, which are consisted of gray coarse ash and olive black fine ash beds. Most part of the clay beds are heavily cracked, because the gas inflated.
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
1
2
3
4
5
6
7
8
9
CC


904 VCD; 904-C9010B-5H; Depth 33.13–42.95(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Se...
Litholo...
Fossils
Bioturb...
Mu...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
Massive olive gray silty clay, intercalated with a very thick scoria bed and a very thick pumice rich beds. The clay beds at the upper part of the core is cracked, because of the gas. The scoria bed is interclated with a few pumice-rich layers, and they are deformed modelately. Between section 8 to CC, there is an alternation of pumice-rich coarse ash beds. The beds also entirely deformed.
GRA density (g/cm³)
Magnetic susceptibility (×10□⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
33.200
33.400
33.600
33.800
34.000
34.200
34.400
34.600
34.800
35.000
35.200
35.400
35.600
35.800
36.000
36.200
36.400
36.600
36.800
37.000
37.200
37.400
37.600
37.800
38.000
38.200
38.400
38.600
38.800
39.000
39.200
39.400
39.600
39.800
40.000
40.200
40.400
40.600
40.800
41.000
41.200
41.400
41.600
41.800
42.000
42.200
42.400
42.600
42.800
1
2
3
4
5
6
7
8
9
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000

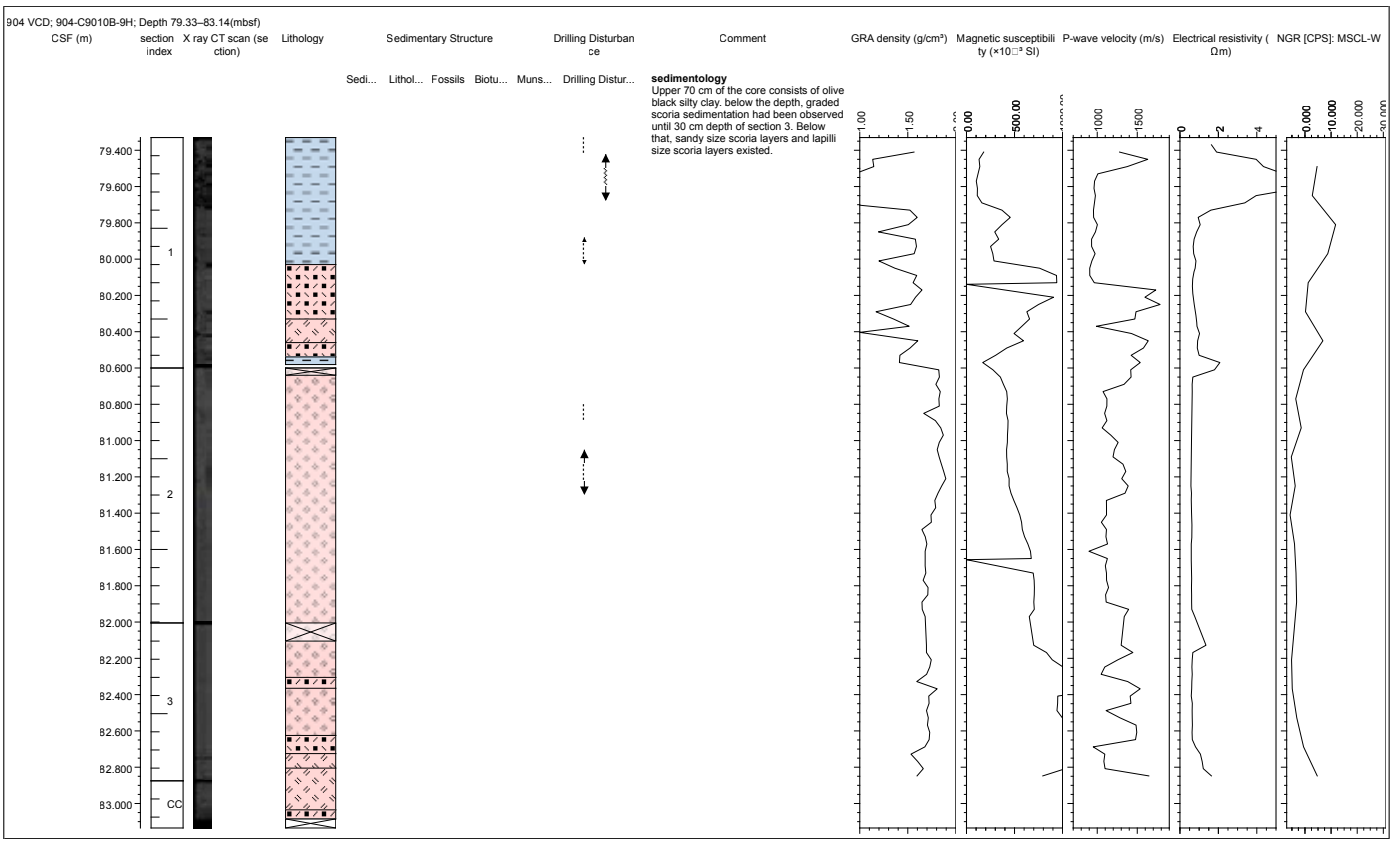

904 VCD; 904-C9010B-6H; Depth 42.63–52.86(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Se... Lit... Fossils
Bioturb... Mu...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
sedimentology
Olive black silty clay and pumice-rich coarse ash beds.
Between section 2 to 4, there is an alternation of the pumice-rich thin olive gray muddy fine ash beds and medium to thick white very coarse ash beds. The unit of the alternation is modelately deformed. At thhe bottom of section 3, we can recognize a flow in structure. The clay beds under the ash alternation is entirely cracked. At section 8, there is a soupy clay unit. The most bottom part of thecore consists of medium sand size scoria bed.
42.800
43.000
43.200
43.400
43.600
43.800
44.000
44.200
44.400
44.600
44.800
45.000
45.200
45.400
45.600
45.800
46.000
46.200
46.400
46.600
46.800
47.000
47.200
47.400
47.600
47.800
48.000
48.200
48.400
48.600
48.800
49.000
49.200
49.400
49.600
49.800
50.000
50.200
50.400
50.600
50.800
51.000
51.200
51.400
51.600
51.800
52.000
52.200
52.400
52.600
52.800
1
2
3
4
5
6
7
8
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000

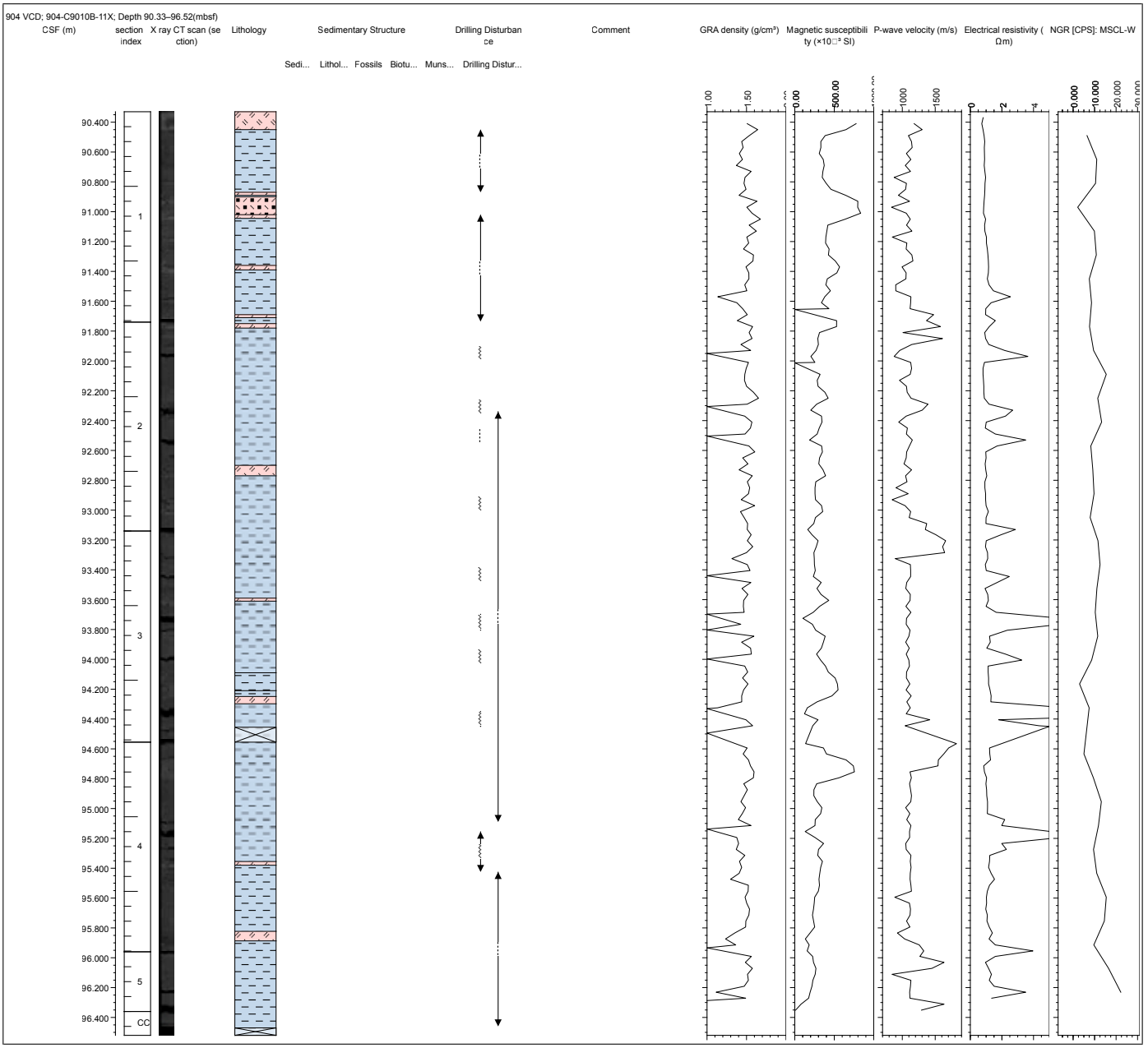

904 VCD; 904-C9010B-7H; Depth 52.13–60.38(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Lith...
Fos...
Biot...
Munsell c...
Drilling Disturban ce
Drilling Distur...
Comment
sedimentology
The core mainly consist of sand size scoria. moderate to heavy disturbance was observed at upper and lower part of the core.
GRA density (g/cm³)
Magnetic susceptibili ty (×10□⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
52.200
52.400
52.600
52.800
53.000
53.200
53.400
53.600
53.800
54.000
54.200
54.400
54.600
54.800
55.000
55.200
55.400
55.600
55.800
56.000
56.200
56.400
56.600
56.800
57.000
57.200
57.400
57.600
57.800
58.000
58.200
58.400
58.600
58.800
59.000
59.200
59.400
59.600
59.800
60.000
60.200
1
2
3
4
5
6
CC
?

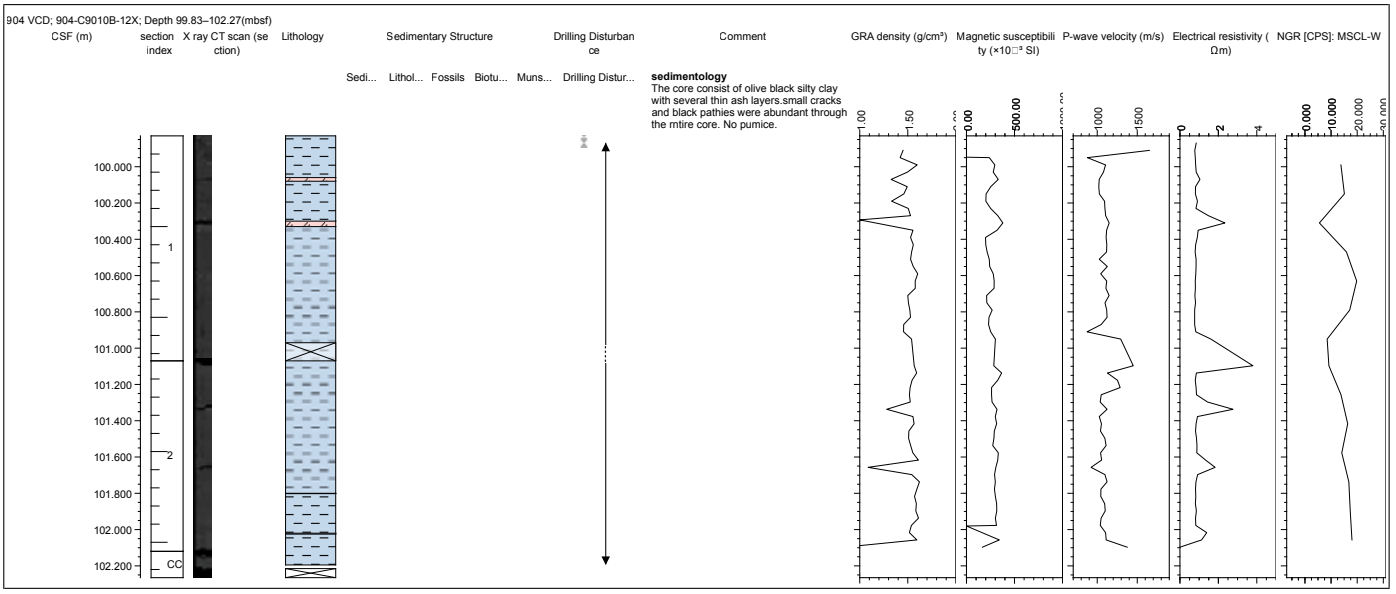
904 VCD; 904-C9010B-8X; Depth 60.33–66.51(mbsf)



sedimentology
The core mainly consist of dark olive gray silty clay. Black pathies were abundant at most part of the core. Vertical cracks were observed at entire core. Several thin volcanic ash layers were sedimented.

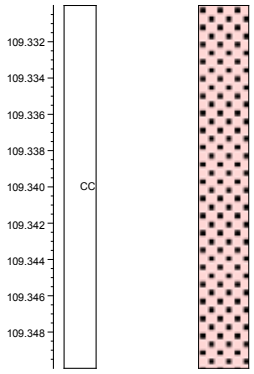

904 VCD; 904-C9010B-9H; Depth 79.33–83.14(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Lithol...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
Upper 70 cm of the core consists of olive black silty clay. below the depth, graded scoria sedimentation had been observed until 30 cm depth of section 3. Below that, sandy size scoria layers and lapilli size scoria layers existed.
GRA density (g/cm³)
Magnetic susceptibility (×10□⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
79.400
79.600
79.800
80.000
80.200
80.400
80.600
80.800
81.000
81.200
81.400
81.600
81.800
82.000
82.200
82.400
82.600
82.800
83.000
1
2
3
CC

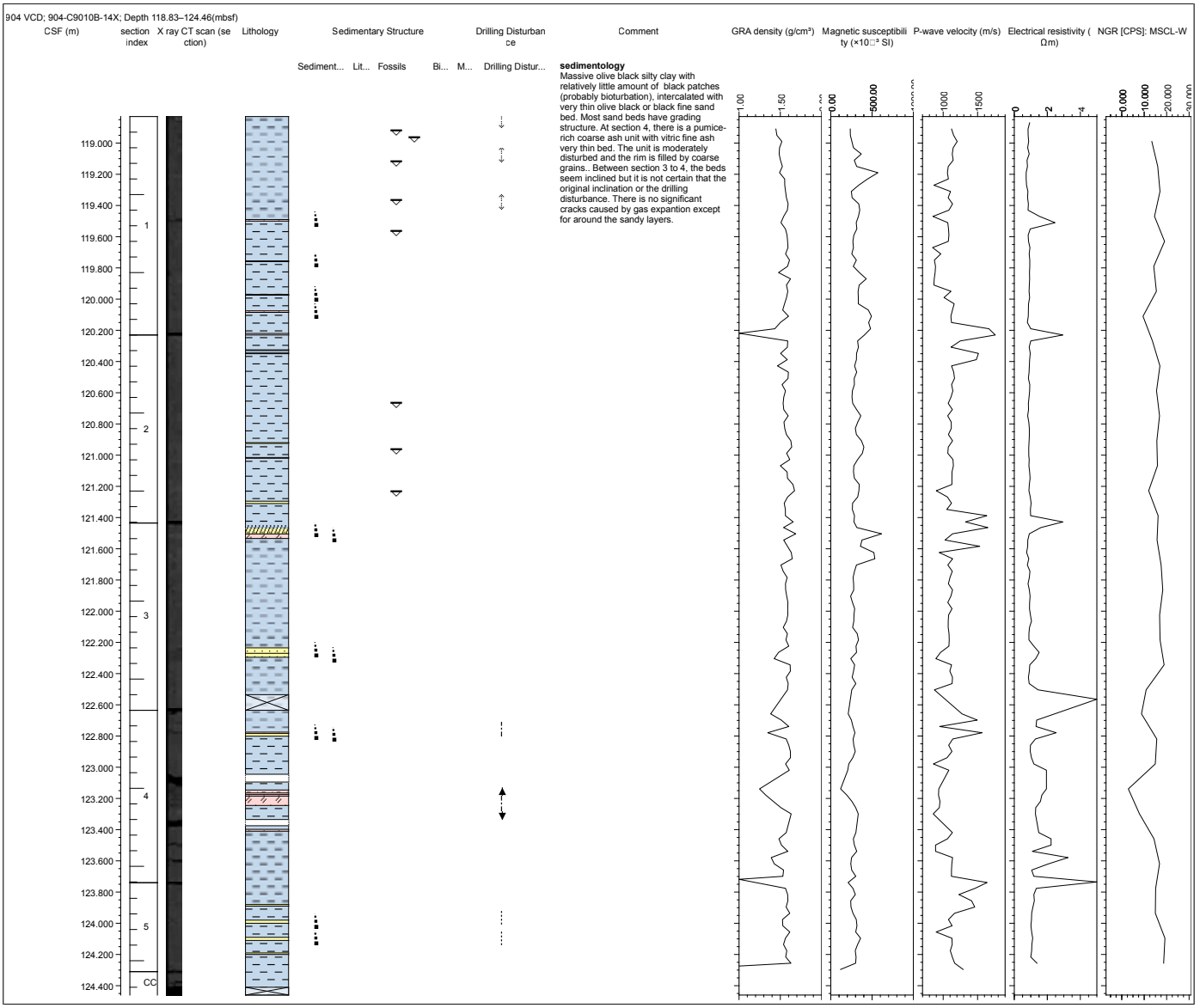

904 VCD; 904-C9010B-11X; Depth 90.33–96.52(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Lithol...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
90.400
90.600
90.800
91.000
91.200
91.400
91.600
91.800
92.000
92.200
92.400
92.600
92.800
93.000
93.200
93.400
93.600
93.800
94.000
94.200
94.400
94.600
94.800
95.000
95.200
95.400
95.600
95.800
96.000
96.200
96.400
1
2
3
4
5
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000

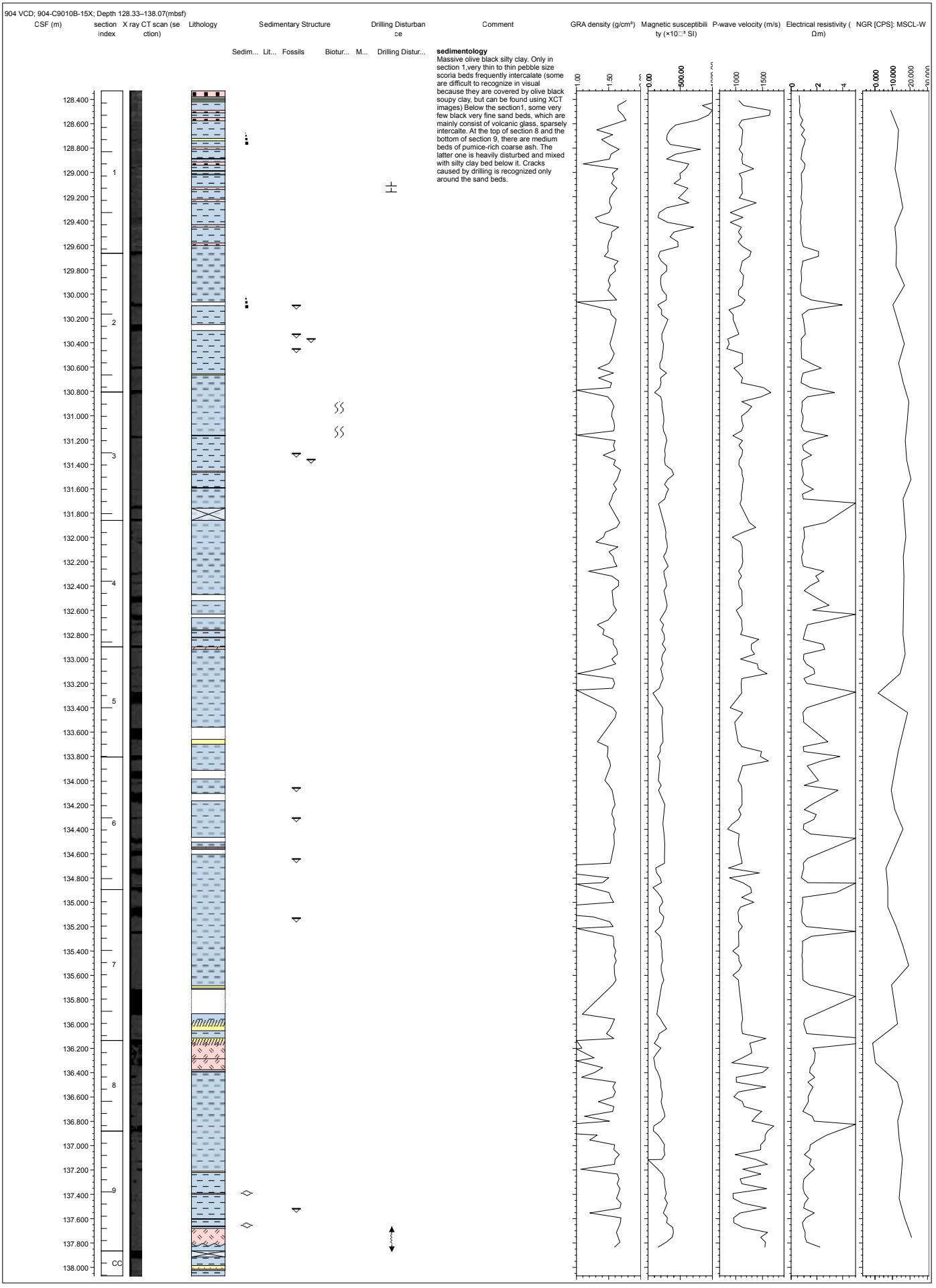

904 VCD; 904-C9010B-12X; Depth 99.83–102.27(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Lithol...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
The core consist of olive black silty clay with several thin ash layers.small cracks and black pathies were abundant through the rntire core. No pumice.
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
100.000
100.200
100.400
100.600
100.800
101.000
101.200
101.400
101.600
101.800
102.000
102.200
1
2
CC
1000
1500
2
4
10.000
20.000

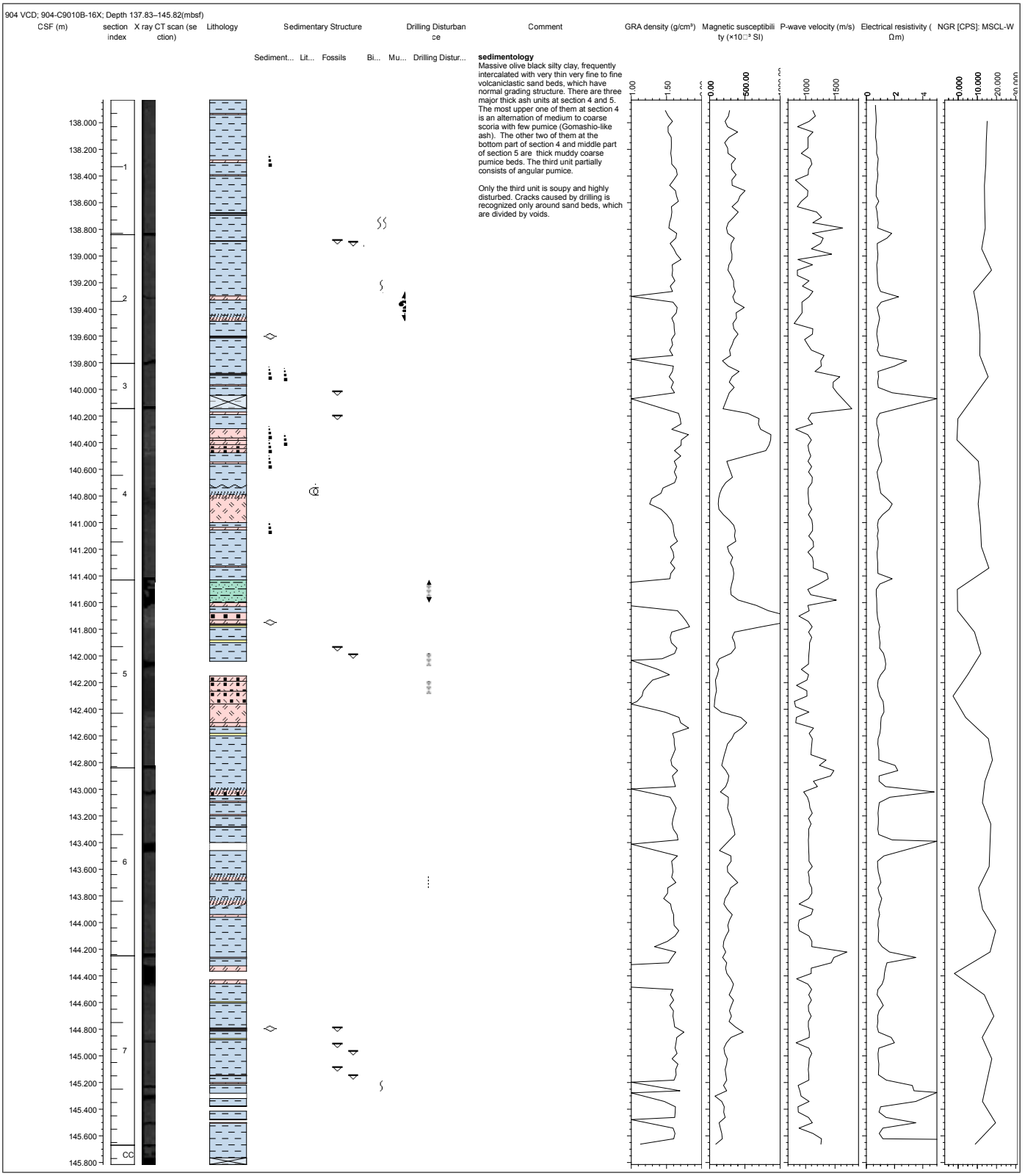
904 VCD; 904-C9010B-13X; Depth 109.33–109.35(mbsf)

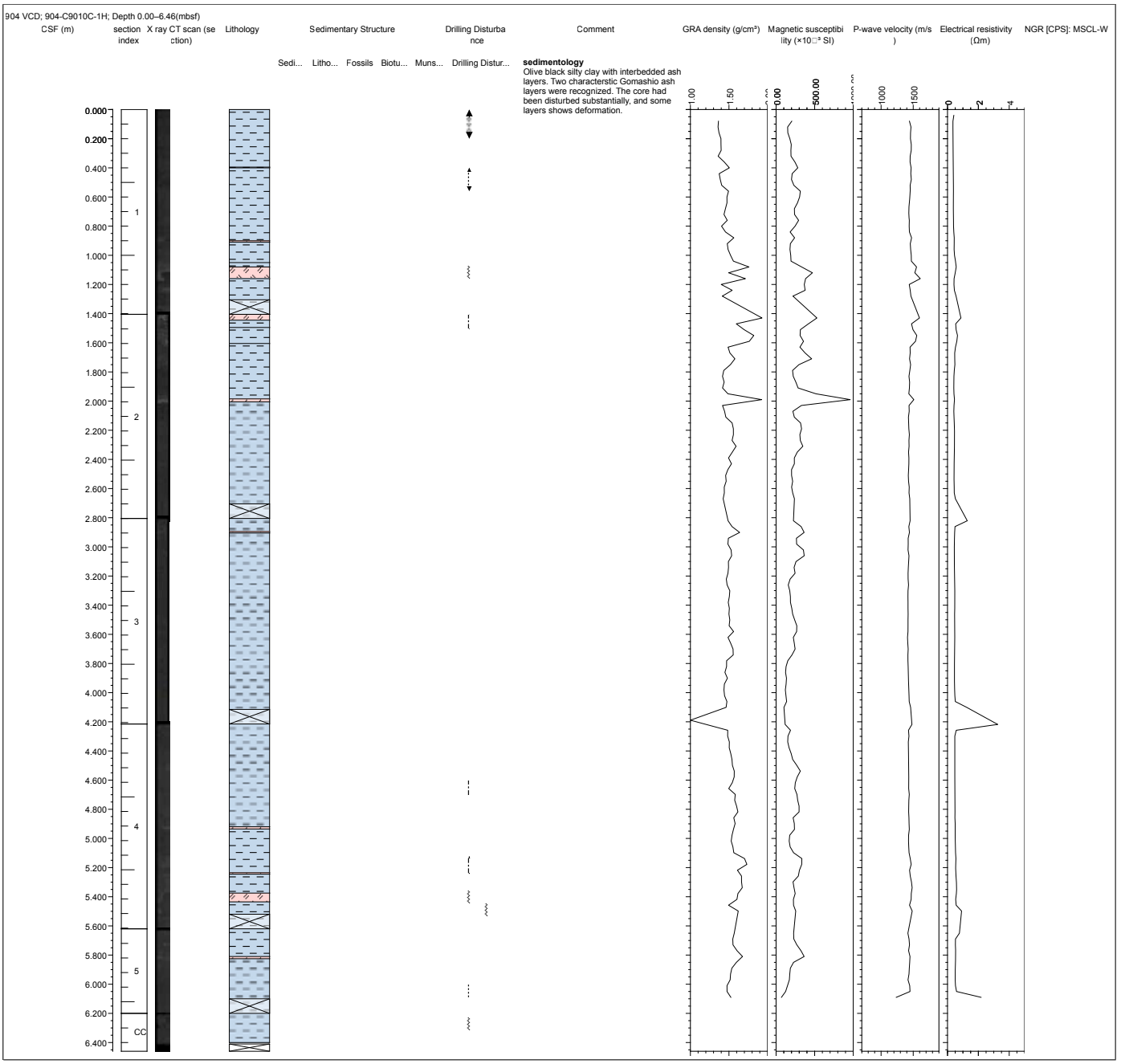
CSF (m)	section index	X ray CT scan (section)	Lithology	Sedimentary Structure					Drilling Disturbance	Comment	GRA density (g/cm³)	Magnetic susceptibility (×10□⁻⁵ SI)	P-wave velocity (m/s)	Electrical resistivity (Ωm)	NGR [CPS]: MSCL-W
				Sedi...	Lithol...	Fossils	Biotu...	Muns...	Drilling Distur...	**sedimentology** Only a few grains, not a bed.					

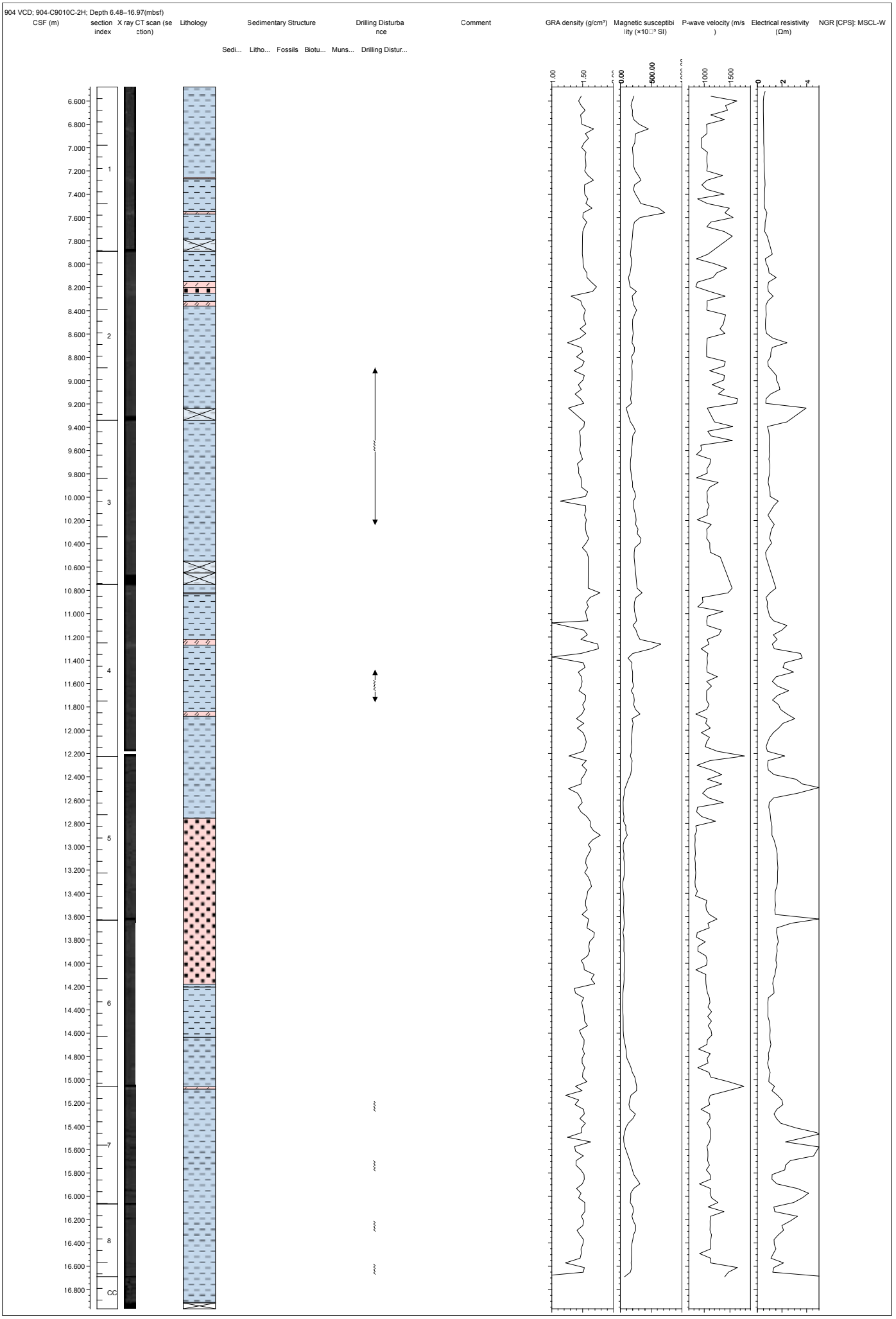


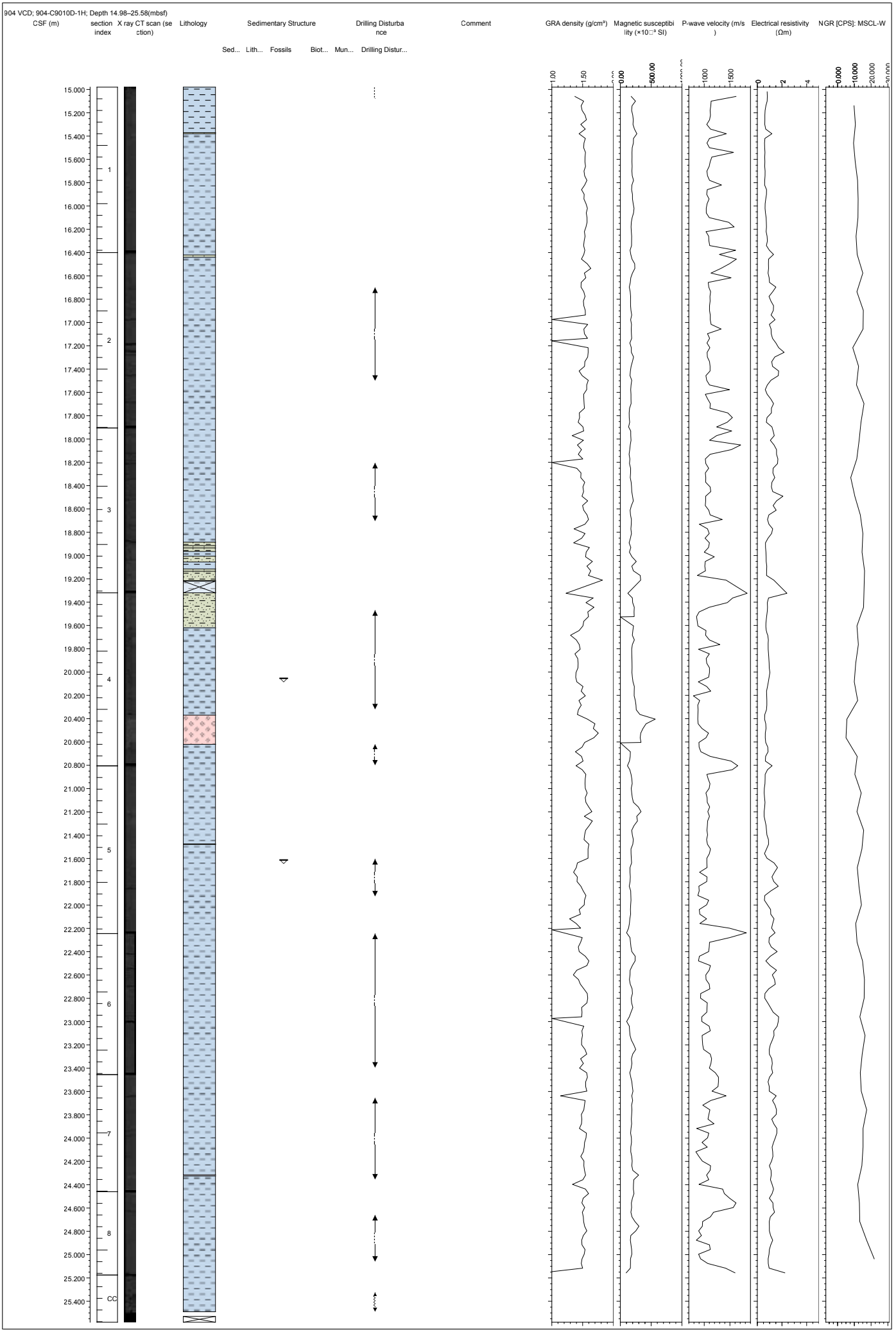

904 VCD; 904-C9010B-14X; Depth 118.83–124.46(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sediment...
Lit...
Fossils
Bi...
M...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
Massive olive black silty clay with relatively little amount of black patches (probably bioturbation), intercalated with very thin olive black or black fine sand bed. Most sand beds have grading structure. At section 4, there is a pumice-rich coarse ash unit with vitric fine ash very thin bed. The unit is moderately disturbed and the rim is filled by coarse grains.. Between section 3 to 4, the beds seem inclined but it is not certain that the original inclination or the drilling disturbance. There is no significant cracks caused by gas expantion except for around the sandy layers.
GRA density (g/cm³)
Magnetic susceptibility (×10□⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
119.000
119.200
119.400
119.600
119.800
120.000
120.200
120.400
120.600
120.800
121.000
121.200
121.400
121.600
121.800
122.000
122.200
122.400
122.600
122.800
123.000
123.200
123.400
123.600
123.800
124.000
124.200
124.400
1
2
3
4
5
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000

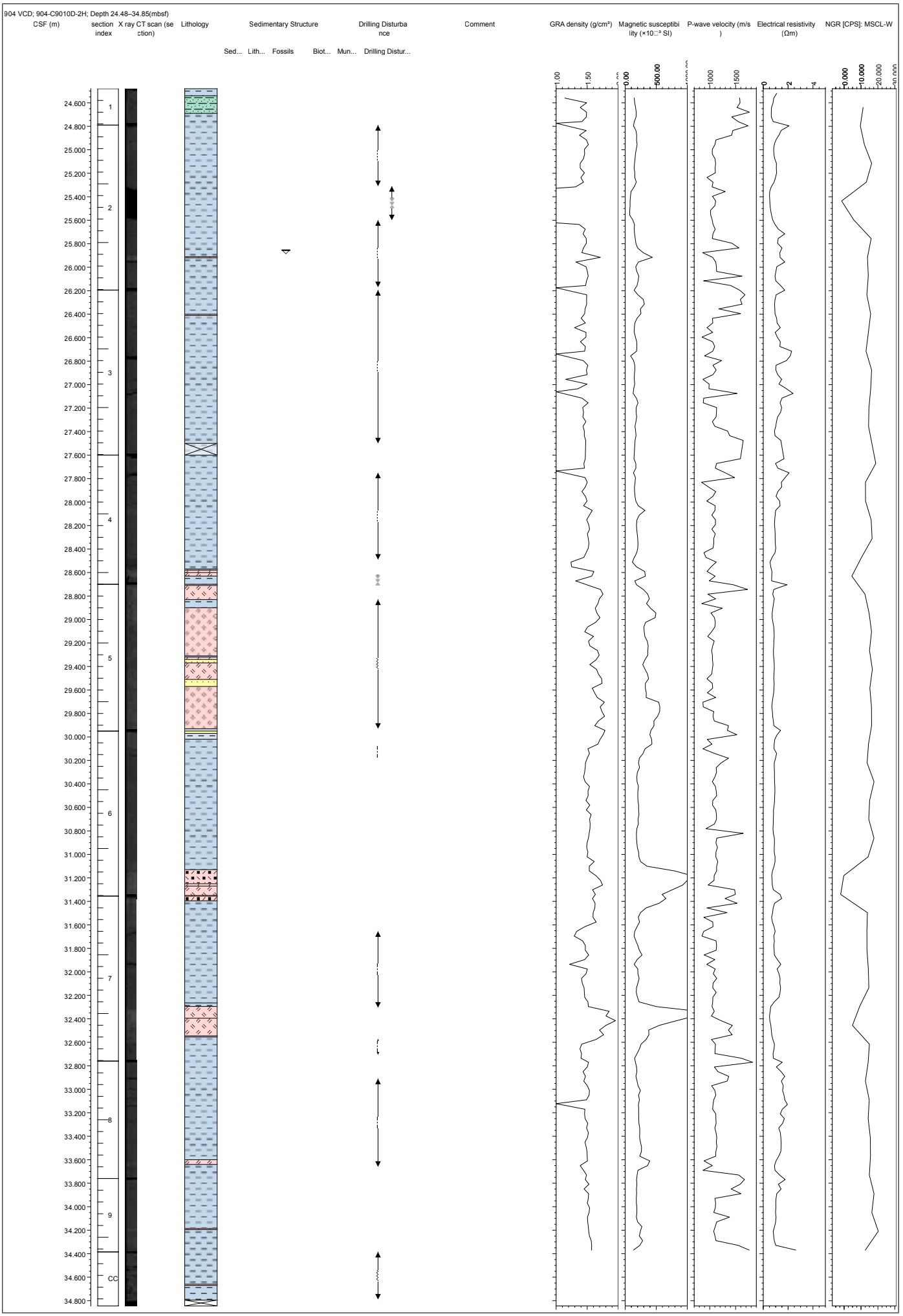

904 VCD; 904-C9010B-15X; Depth 128.33–138.07(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedim...
Lit...
Fossils
Biotur...
M...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
Massive olive black silty clay. Only in section 1,very thin to thin pebble size scoria beds frequently intercalate (some are difficult to recognize in visual because they are covered by olive black soupy clay, but can be found using XCT images) Below the section1, some very few black very fine sand beds, which are mainly consist of volcanic glass, sparsely intercalte. At the top of section 8 and the bottom of section 9, there are medium beds of pumice-rich coarse ash. The latter one is heavily disturbed and mixed with silty clay bed below it. Cracks caused by drilling is recognized only around the sand beds.
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
128.400
128.600
128.800
129.000
129.200
129.400
129.600
129.800
130.000
130.200
130.400
130.600
130.800
131.000
131.200
131.400
131.600
131.800
132.000
132.200
132.400
132.600
132.800
133.000
133.200
133.400
133.600
133.800
134.000
134.200
134.400
134.600
134.800
135.000
135.200
135.400
135.600
135.800
136.000
136.200
136.400
136.600
136.800
137.000
137.200
137.400
137.600
137.800
138.000
1
2
3
4
5
6
7
8
9
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000
30.000


904 VCD; 904-C9010B-16X; Depth 137.83–145.82(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sediment...
Lit...
Fossils
Drilling Disturbance
Bi...
Mu...
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
sedimentology
Massive olive black silty clay, frequently intercalated with very thin very fine to fine volcaniclastic sand beds, which have normal grading structure. There are three major thick ash units at section 4 and 5. The most upper one of them at section 4 is an alternation of medium to coarse scoria with few pumice (Gomashio-like ash). The other two of them at the bottom part of section 4 and middle part of section 5 are thick muddy coarse pumice beds. The third unit partially consists of angular pumice.
Only the third unit is soupy and highly disturbed. Cracks caused by drilling is recognized only around sand beds, which are divided by voids.
138.000
138.200
138.400
138.600
138.800
139.000
139.200
139.400
139.600
139.800
140.000
140.200
140.400
140.600
140.800
141.000
141.200
141.400
141.600
141.800
142.000
142.200
142.400
142.600
142.800
143.000
143.200
143.400
143.600
143.800
144.000
144.200
144.400
144.600
144.800
145.000
145.200
145.400
145.600
145.800
1
2
3
4
5
6
7
CC


904 VCD; 904-C9010C-1H; Depth 0.00–6.46(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Litho...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
Olive black silty clay with interbedded ash layers. Two characterstic Gomashio ash layers were recognized. The core had been disturbed substantially, and some layers shows deformation.
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
0.000
0.200
0.400
0.600
0.800
1.000
1.200
1.400
1.600
1.800
2.000
2.200
2.400
2.600
2.800
3.000
3.200
3.400
3.600
3.800
4.000
4.200
4.400
4.600
4.800
5.000
5.200
5.400
5.600
5.800
6.000
6.200
6.400
1
2
3
4
5
CC
1.00
1.50
0.00
500.00
1000
1500
0
2


904 VCD; 904-C9010C-2H; Depth 6.48–16.97(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Litho...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
6.600
6.800
7.000
7.200
7.400
7.600
7.800
8.000
8.200
8.400
8.600
8.800
9.000
9.200
9.400
9.600
9.800
10.000
10.200
10.400
10.600
10.800
11.000
11.200
11.400
11.600
11.800
12.000
12.200
12.400
12.600
12.800
13.000
13.200
13.400
13.600
13.800
14.000
14.200
14.400
14.600
14.800
15.000
15.200
15.400
15.600
15.800
16.000
16.200
16.400
16.600
16.800
1
2
3
4
5
6
7
8
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4

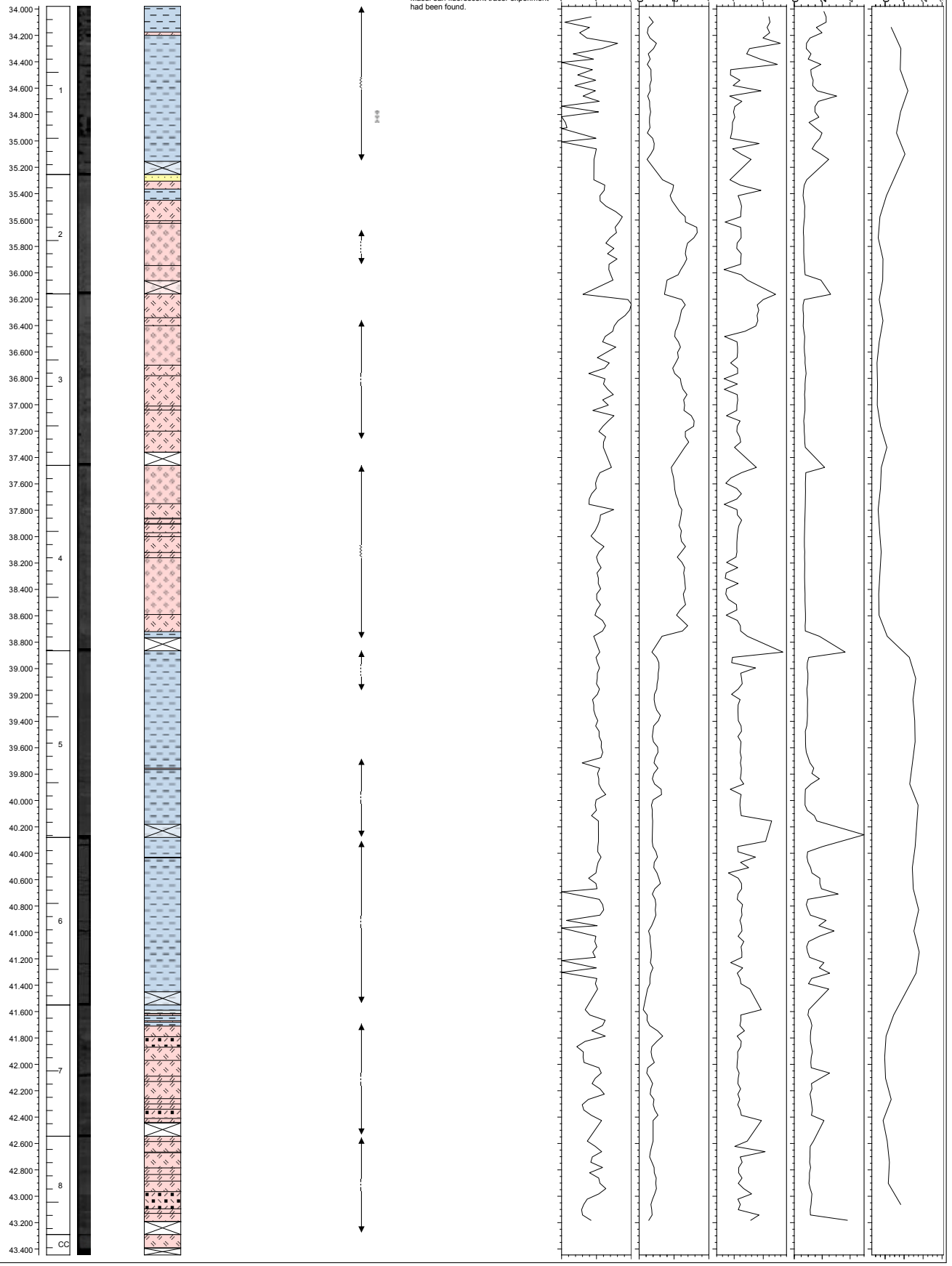

904 VCD; 904-C9010D-1H; Depth 14.98–25.58(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sed...
Lith...
Fossils
Biot...
Mun...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
15.000
15.200
15.400
15.600
15.800
16.000
16.200
16.400
16.600
16.800
17.000
17.200
17.400
17.600
17.800
18.000
18.200
18.400
18.600
18.800
19.000
19.200
19.400
19.600
19.800
20.000
20.200
20.400
20.600
20.800
21.000
21.200
21.400
21.600
21.800
22.000
22.200
22.400
22.600
22.800
23.000
23.200
23.400
23.600
23.800
24.000
24.200
24.400
24.600
24.800
25.000
25.200
25.400
1
2
3
4
5
6
7
8
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000

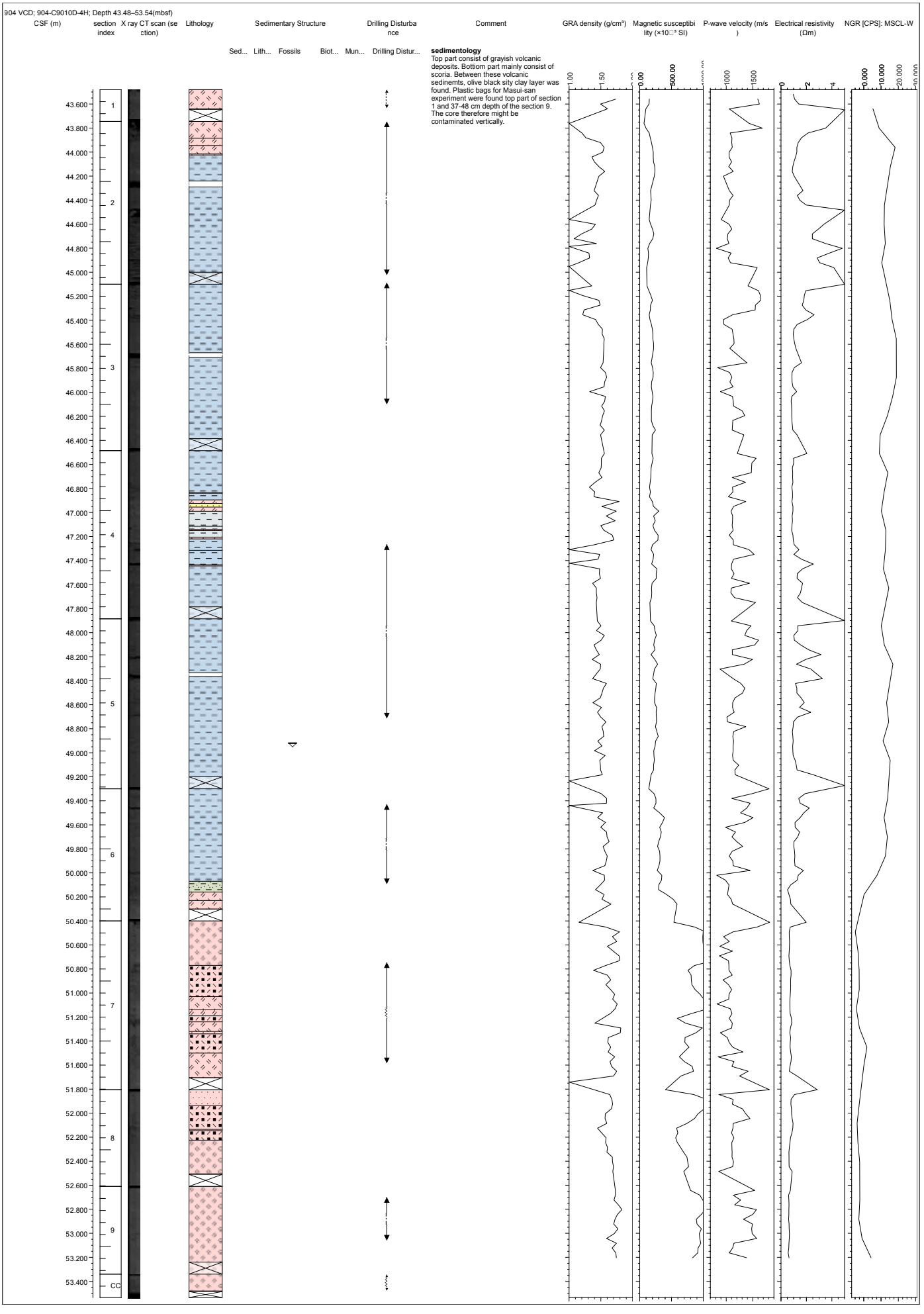

904 VCD; 904-C9010D-2H; Depth 24.48–34.85(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sed...
Lith...
Fossils
Biot...
Mun...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
24.600
24.800
25.000
25.200
25.400
25.600
25.800
26.000
26.200
26.400
26.600
26.800
27.000
27.200
27.400
27.600
27.800
28.000
28.200
28.400
28.600
28.800
29.000
29.200
29.400
29.600
29.800
30.000
30.200
30.400
30.600
30.800
31.000
31.200
31.400
31.600
31.800
32.000
32.200
32.400
32.600
32.800
33.000
33.200
33.400
33.600
33.800
34.000
34.200
34.400
34.600
34.800
1
2
3
4
5
6
7
8
9
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000
30.000

904 VCD; 904-C9010D-3H; Depth 33.98–43.45(mbsf)

CSF (m) | section index | X ray CT scan (section) | Lithology | Sedimentary Structure: Sedi... Litho... Fossils Biotu... Muns... | Drilling Disturbance: Drilling Distur... | Comment | GRA density (g/cm³) | Magnetic susceptibility (×10□³ SI) | P-wave velocity (m/s) | Electrical resistivity (Ωm) | NGR [CPS]: MSCL-W

sedimentology
This core mailly consist of olive black silty clay and thick volcanic ash layers. At the 80-88cm of section 1, plactic bag of Masui-san fluorescent tracer experiment had been found.




904 VCD; 904-C9010D-4H; Depth 43.48–53.54(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sed...
Lith...
Fossils
Biot...
Mun...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
Top part consist of grayish volcanic deposits. Bottiom part mainly consist of scoria. Between these volcanic sedinemts, olive black sity clay layer was found. Plastic bags for Masui-san experiment were found top part of section 1 and 37-48 cm depth of the section 9. The core therefore might be contaminated vertically.
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000
43.600
43.800
44.000
44.200
44.400
44.600
44.800
45.000
45.200
45.400
45.600
45.800
46.000
46.200
46.400
46.600
46.800
47.000
47.200
47.400
47.600
47.800
48.000
48.200
48.400
48.600
48.800
49.000
49.200
49.400
49.600
49.800
50.000
50.200
50.400
50.600
50.800
51.000
51.200
51.400
51.600
51.800
52.000
52.200
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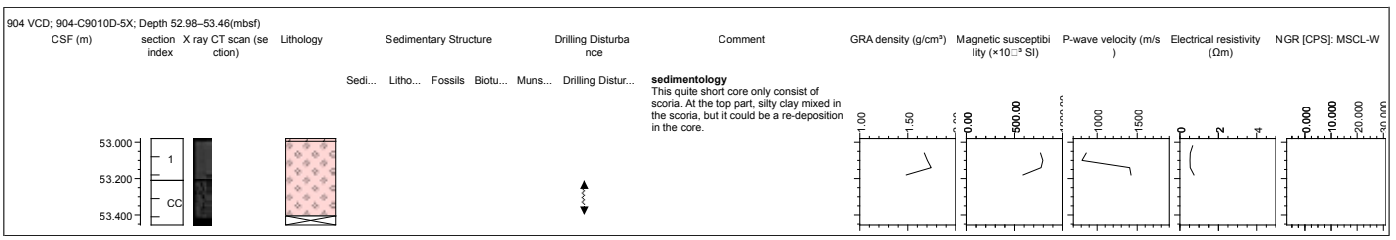
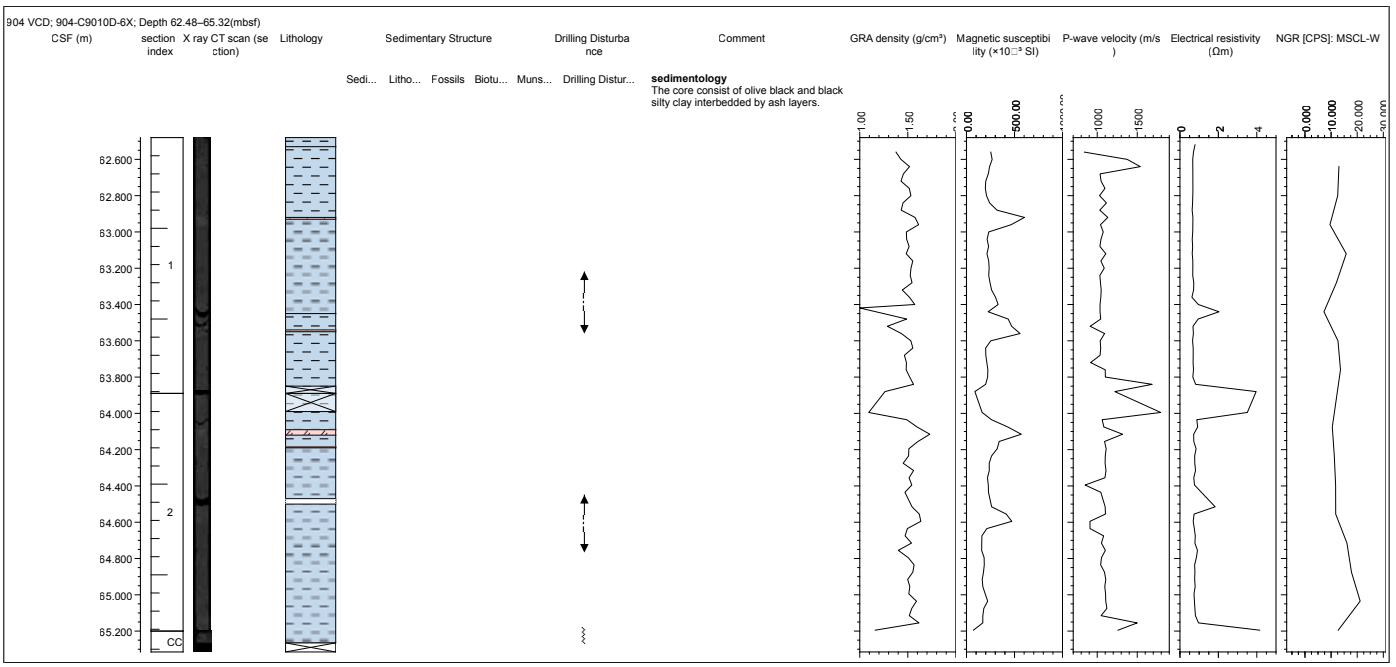
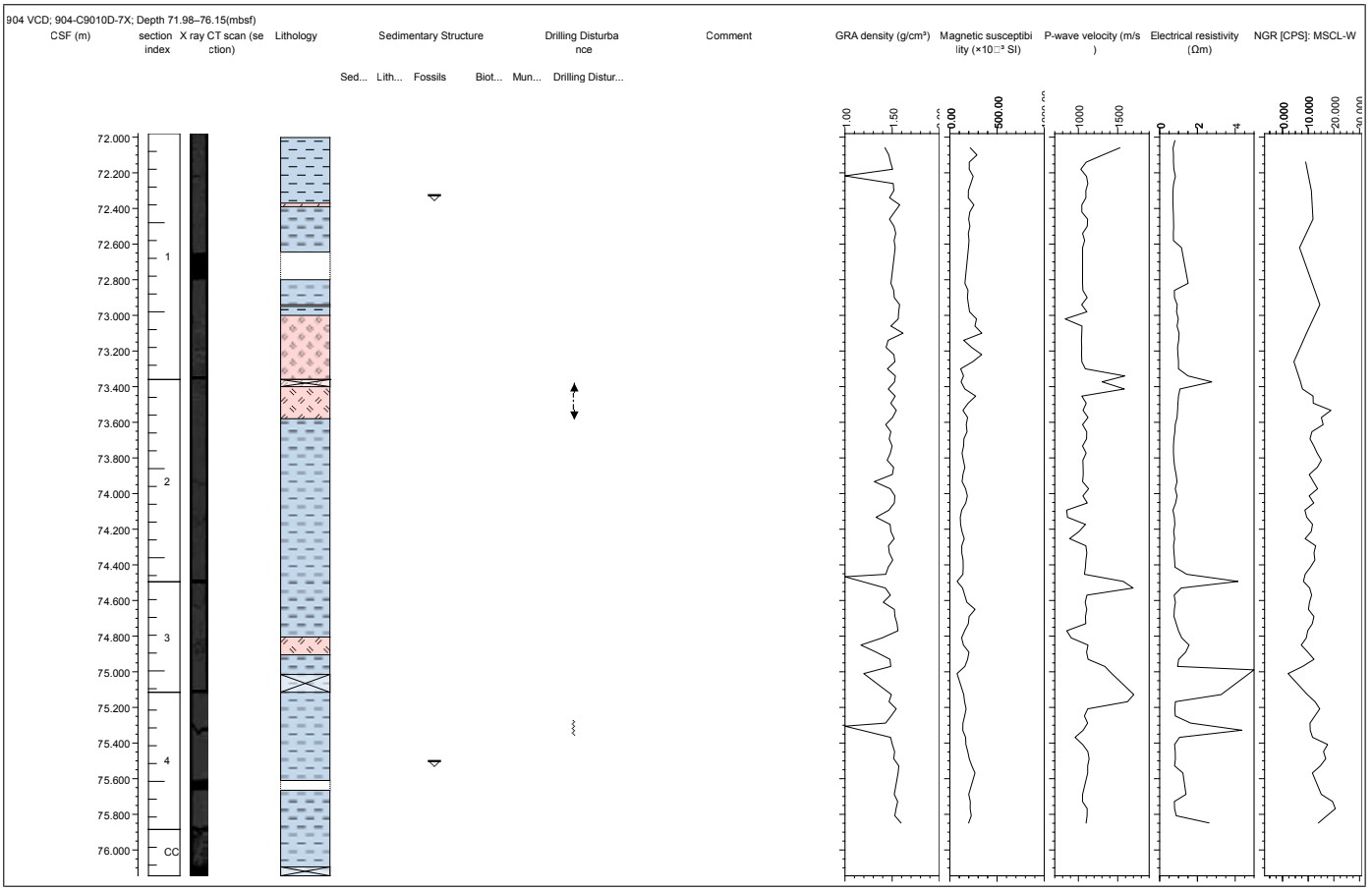
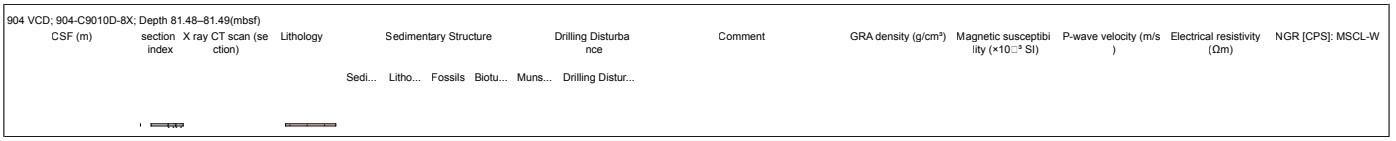
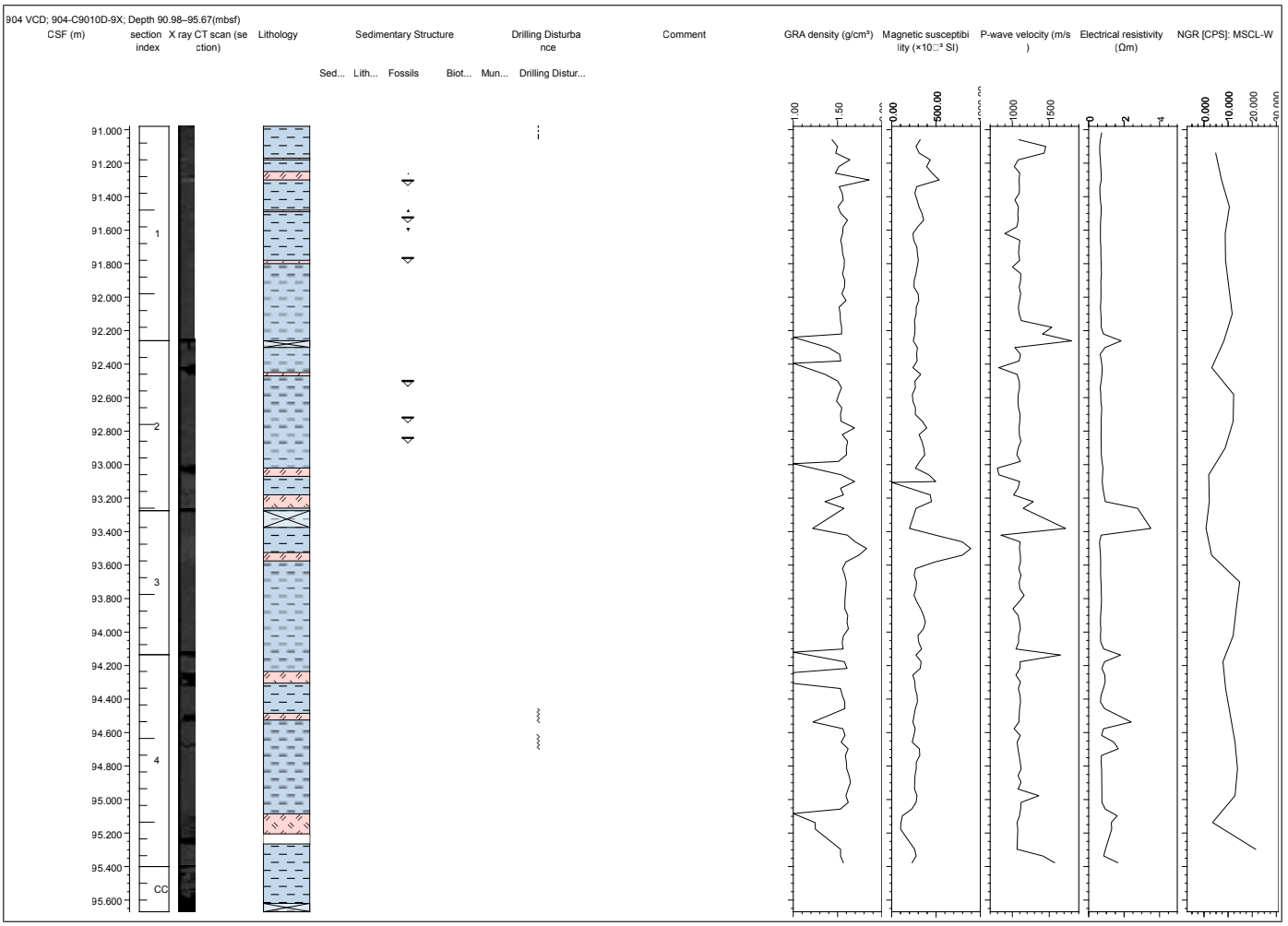
1
2
3
4
5
6
7
8
9
CC

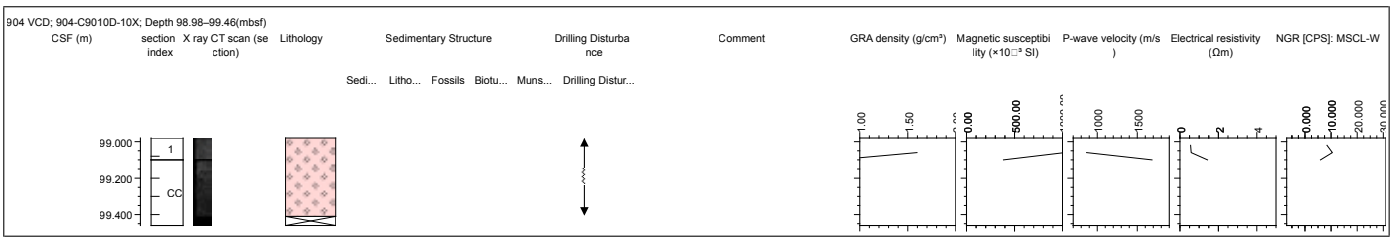

904 VCD; 904-C9010D-5X; Depth 52.98–53.46(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Litho...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
This quite short core only consist of scoria. At the top part, silty clay mixed in the scoria, but it could be a re-deposition in the core.
GRA density (g/cm³)
Magnetic susceptibility (×10□⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
53.000
53.200
53.400
1
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000
30.000

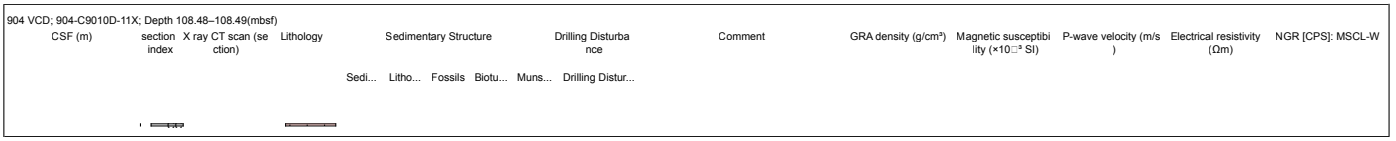

904 VCD; 904-C9010D-6X; Depth 62.48–65.32(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Litho...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
sedimentology
The core consist of olive black and black silty clay interbedded by ash layers.
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
62.600
62.800
63.000
63.200
63.400
63.600
63.800
64.000
64.200
64.400
64.600
64.800
65.000
65.200
1
2
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000

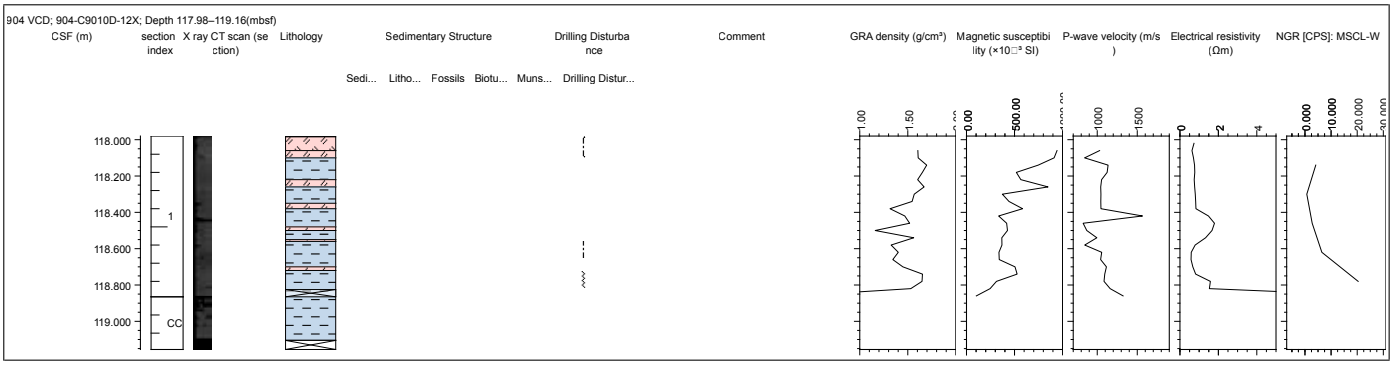

904 VCD; 904-C9010D-7X; Depth 71.98–76.15(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sed...
Lith...
Fossils
Biot...
Mun...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
72.000
72.200
72.400
72.600
72.800
73.000
73.200
73.400
73.600
73.800
74.000
74.200
74.400
74.600
74.800
75.000
75.200
75.400
75.600
75.800
76.000
1
2
3
4
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
0.000
10.000
20.000

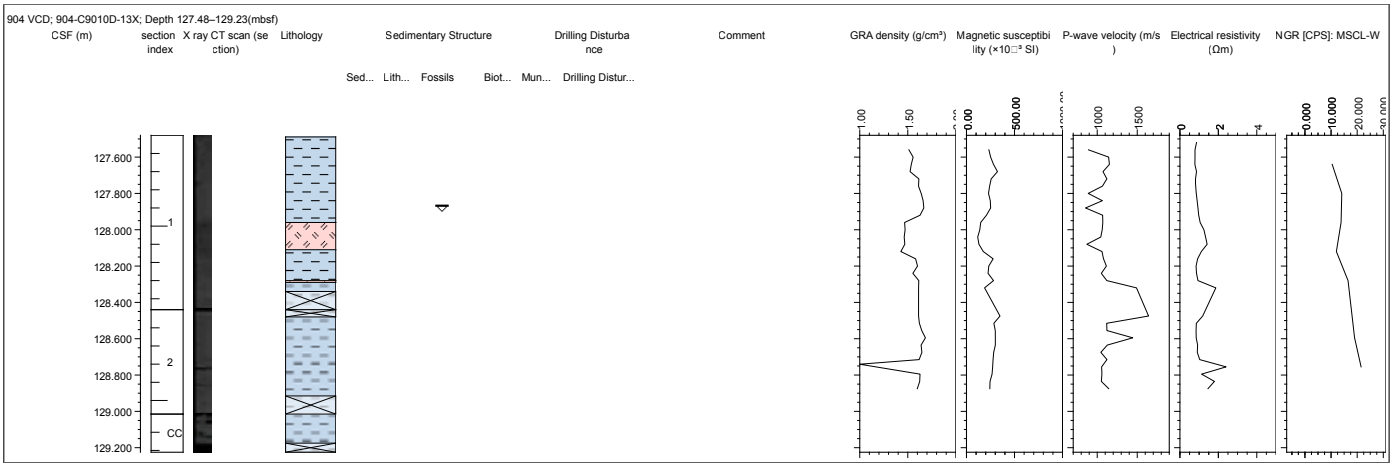

904 VCD; 904-C9010D-8X; Depth 81.48–81.49(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Litho...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W

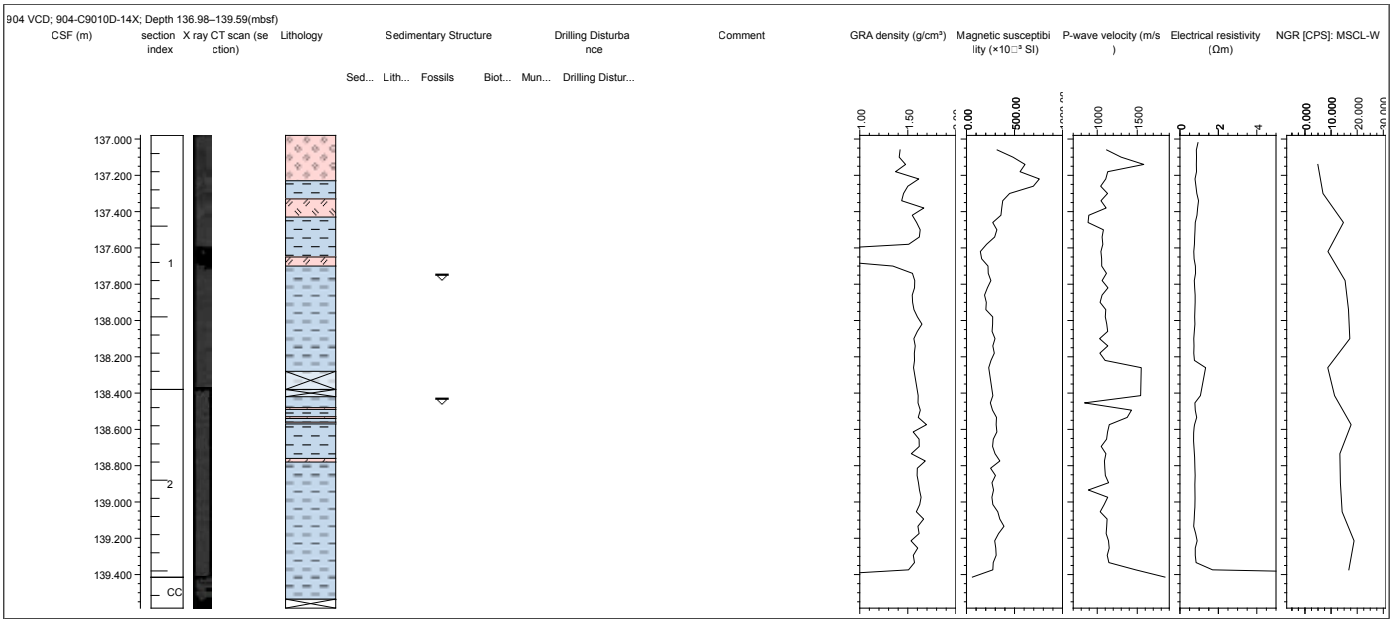

904 VCD; 904-C9010D-9X; Depth 90.98–95.67(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sed...
Lith...
Fossils
Biot...
Mun...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
91.000
91.200
91.400
91.600
91.800
92.000
92.200
92.400
92.600
92.800
93.000
93.200
93.400
93.600
93.800
94.000
94.200
94.400
94.600
94.800
95.000
95.200
95.400
95.600
1
2
3
4
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000


904 VCD; 904-C9010D-10X; Depth 98.98–99.46(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Litho...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
99.000
99.200
99.400
1
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
0.000
10.000
20.000
30.000

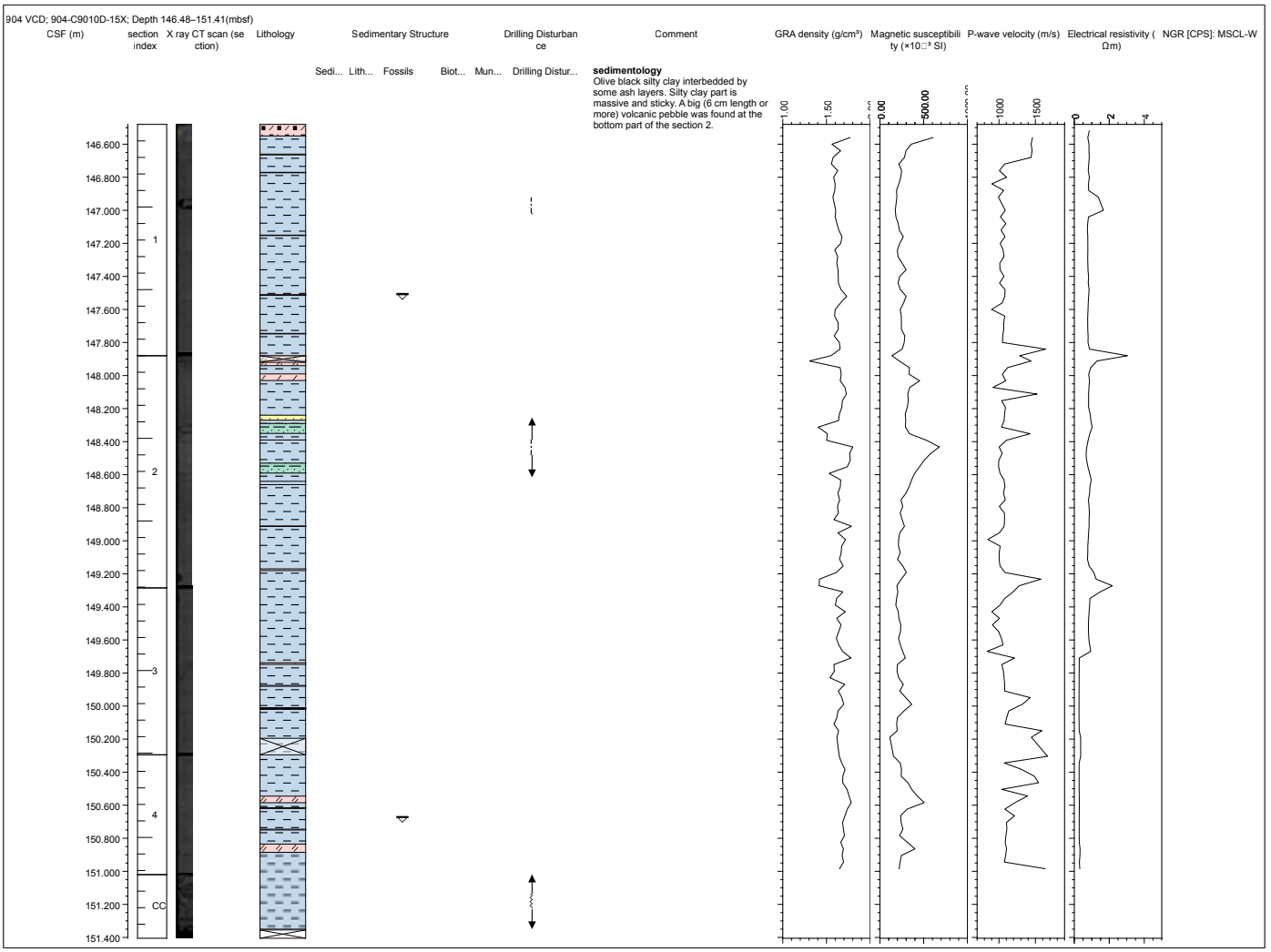

904 VCD; 904-C9010D-11X; Depth 108.48–108.49(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Litho...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W

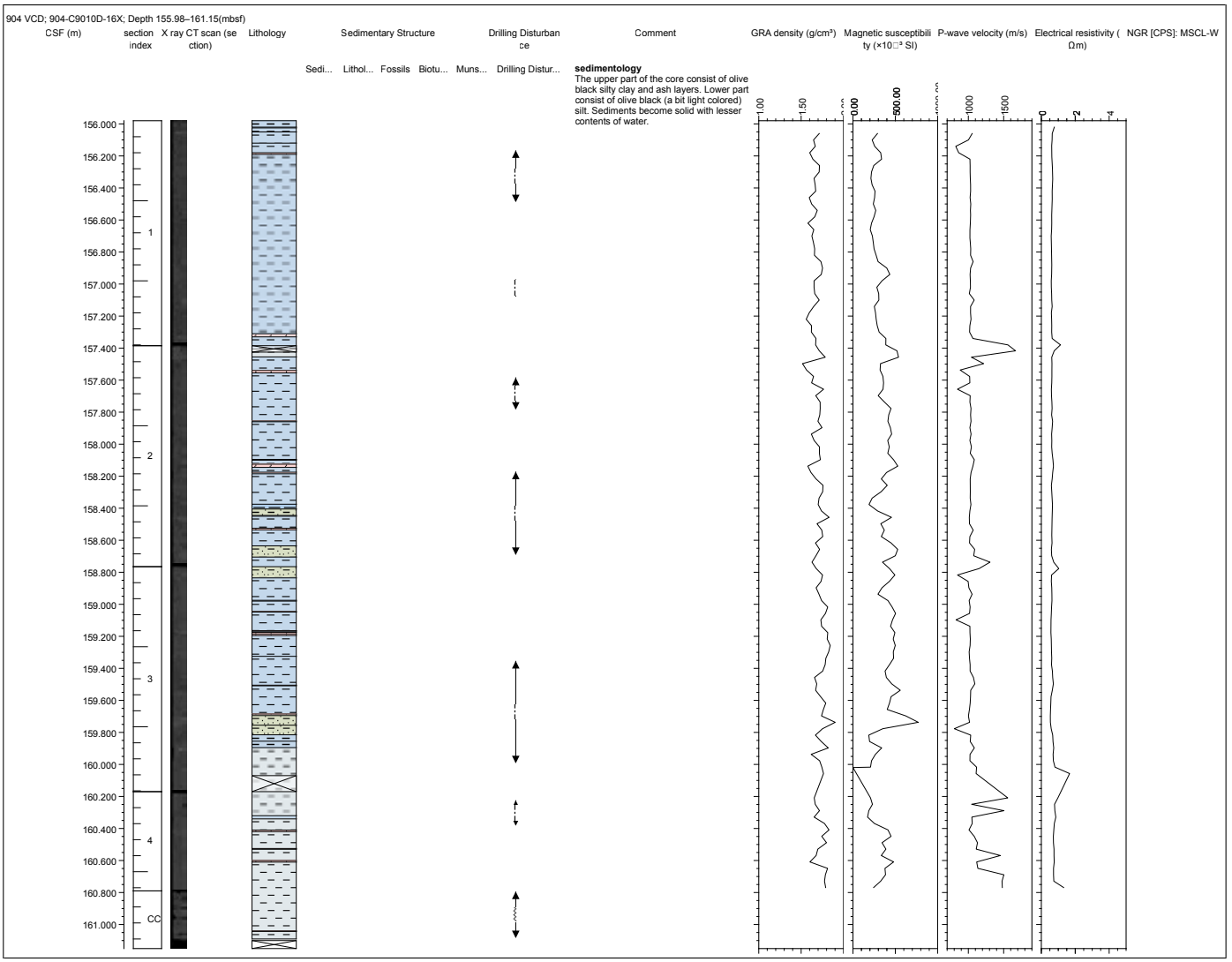

904 VCD; 904-C9010D-12X; Depth 117.98–119.16(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Litho...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
118.000
118.200
118.400
118.600
118.800
119.000
1
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000


904 VCD; 904-C9010D-13X; Depth 127.48–129.23(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sed...
Lith...
Fossils
Biot...
Drilling Disturbance
Mun...
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
127.600
127.800
128.000
128.200
128.400
128.600
128.800
129.000
129.200
1
2
CC
4
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000


904 VCD; 904-C9010D-14X; Depth 136.98–139.59(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sed...
Lith...
Fossils
Biot...
Drilling Disturbance
Mun...
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
137.000
137.200
137.400
137.600
137.800
138.000
138.200
138.400
138.600
138.800
139.000
139.200
139.400
1
2
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
0.000
10.000
20.000

904 VCD; 904-C9010D-15X; Depth 146.48–151.41(mbsf)



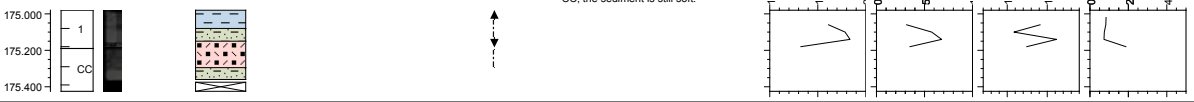

904 VCD; 904-C9010D-16X; Depth 155.98–161.15(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Lithol...
Fossils
Biotu...
Muns...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□⁻⁵ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
sedimentology
The upper part of the core consist of olive black silty clay and ash layers. Lower part consist of olive black (a bit light colored) silt. Sediments become solid with lesser contents of water.
156.000
156.200
156.400
156.600
156.800
157.000
157.200
157.400
157.600
157.800
158.000
158.200
158.400
158.600
158.800
159.000
159.200
159.400
159.600
159.800
160.000
160.200
160.400
160.600
160.800
161.000
1
2
3
4
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4

904 VCD; 904-C9010D-17X; Depth 165.48–165.53(mbsf)

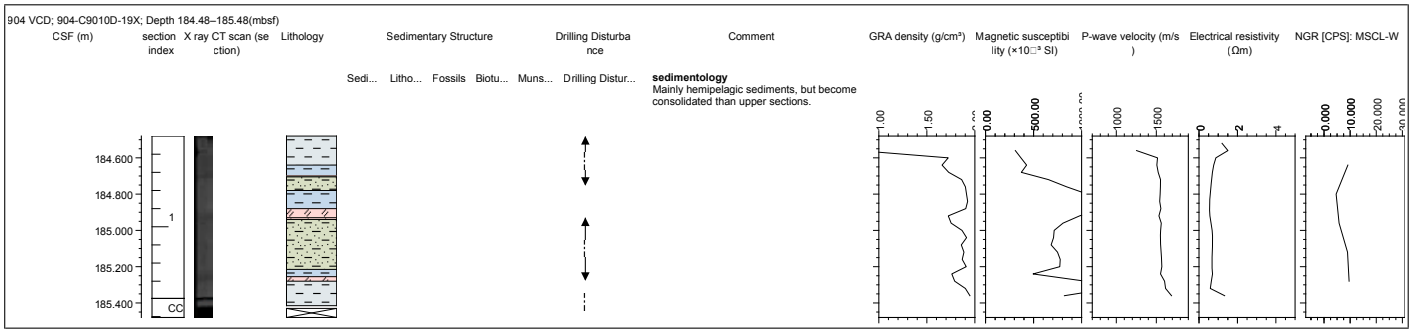
CSF (m)	section index	X ray CT scan (section)	Lithology	Sedimentary Structure					Drilling Disturbance	Comment	GRA density (g/cm³)	Magnetic susceptibility (×10□³ SI)	P-wave velocity (m/s)	Electrical resistivity (Ωm)	NGR [CPS]: MSCL-W
				Sedi...	Lithol...	Fossils	Biotu...	Muns...	Drilling Distur...						
165.480 165.500 165.520	CC									**sedimentology** Whole part of the CC sample was sampled for micropaleontology. Lower part consist of sandy silt. From the top, approx. 2 cm thickness of black mudstone or tuff has been found.					

904 VCD; 904-C9010D-18X; Depth 174.98–175.43(mbsf)

CSF (m)	section index	X ray CT scan (section)	Lithology	Sedimentary Structure					Drilling Disturbance	Comment	GRA density (g/cm³)	Magnetic susceptibility (×10□³ SI)	P-wave velocity (m/s)	Electrical resistivity (Ωm)	NGR [CPS]: MSCL-W
				Sedi...	Lithol...	Fossils	Biotu...	Muns...	Drilling Distur...						

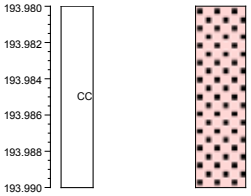


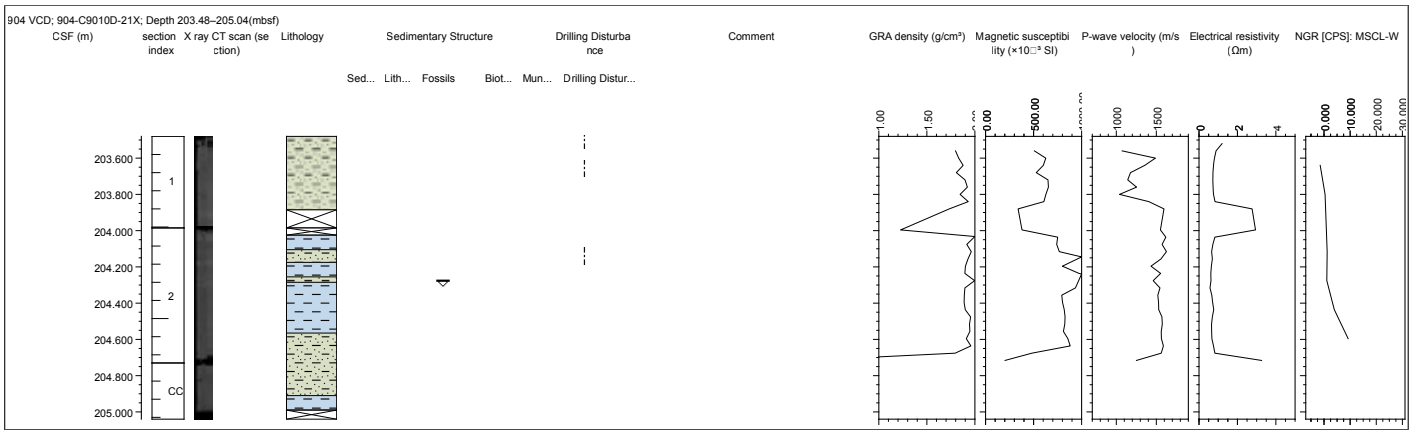
sedimentology
Pieces of drill pipe were abundantly observed in the cores. Hemipelagic sediments in section 1 are so hard. In CC, the sediment is still soft.

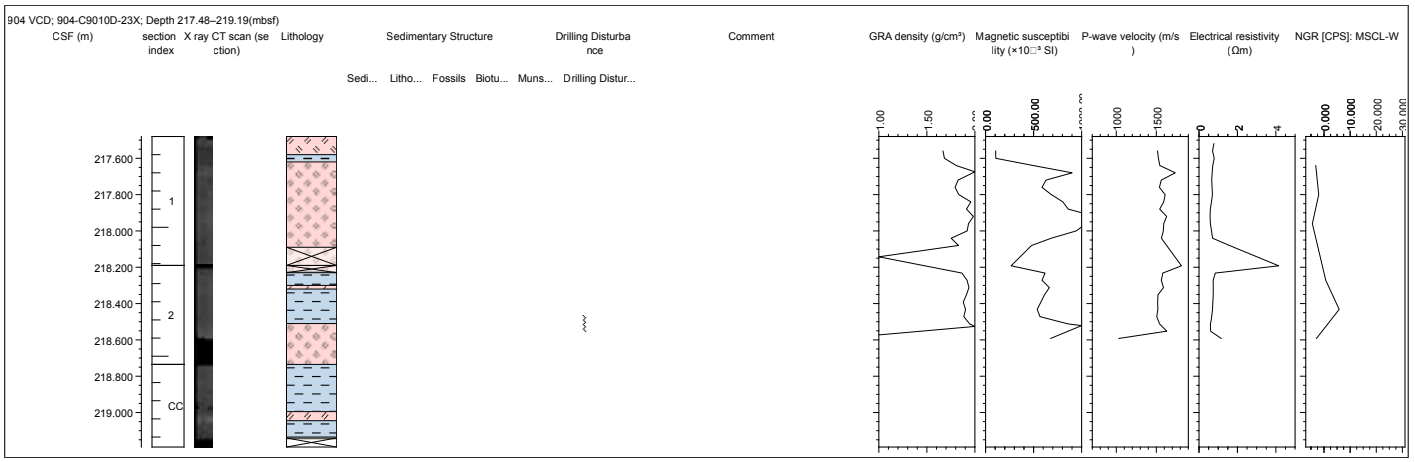

904 VCD; 904-C9010D-19X; Depth 184.48–185.48(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Litho...
Fossils
Biotu...
Muns...
Drilling Disturba nce
Drilling Distur...
Comment
sedimentology
Mainly hemipelagic sediments, but become consolidated than upper sections.
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
184.600
184.800
185.000
185.200
185.400
1
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000

904 VCD; 904-C9010D-20X; Depth 193.98–193.99(mbsf)

CSF (m)	section index	X ray CT scan (section)	Lithology	Sedimentary Structure					Drilling Disturbance	Comment	GRA density (g/cm³)	Magnetic susceptibility (×10□³ SI)	P-wave velocity (m/s)	Electrical resistivity (Ωm)	NGR [CPS]: MSCL-W
				Sedi...	Lithol...	Fossils	Biotu...	Muns...	Drilling Distur...						
										sedimentology Approx 20 grains of scoria and few pumices.					

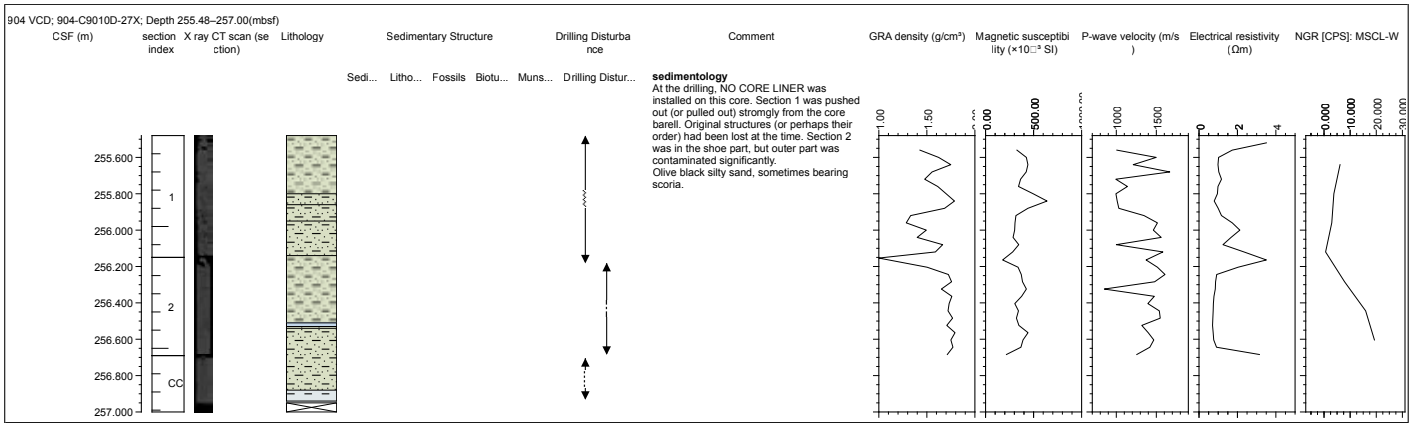


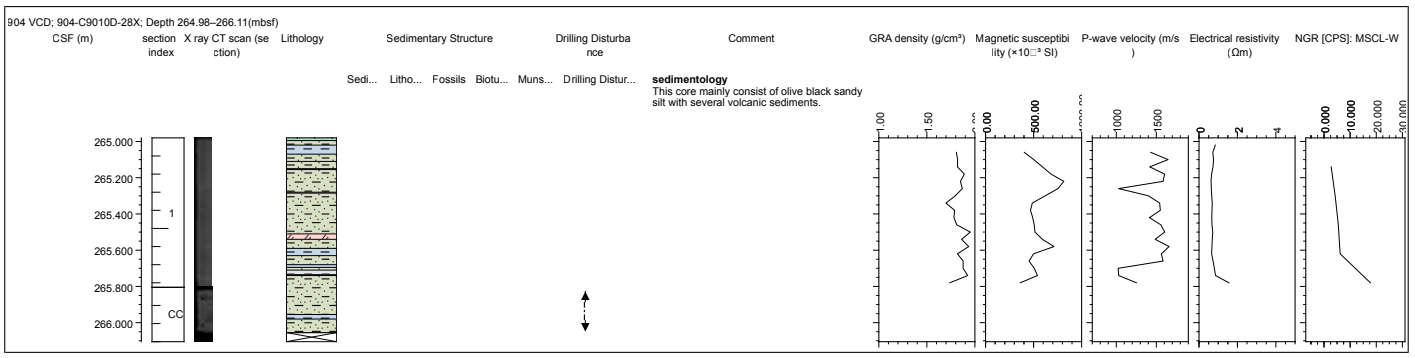

904 VCD; 904-C9010D-21X; Depth 203.48–205.04(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sed...
Lith...
Fossils
Biot...
Mun...
Drilling Disturbance
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
203.600
203.800
204.000
204.200
204.400
204.600
204.800
205.000
1
2
CC
A
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000
30.000


904 VCD; 904-C9010D-23X; Depth 217.48–219.19(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Litho...
Fossils
Biotu...
Muns...
Drilling Disturba nce
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
217.600
217.800
218.000
218.200
218.400
218.600
218.800
219.000
1
2
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000
30.000

904 VCD; 904-C9010D-24X; Depth 226.98–227.12(mbsf)

CSF (m)	section index	X ray CT scan (section)	Lithology	Sedimentary Structure					Drilling Disturbance	Comment	GRA density (g/cm³)	Magnetic susceptibility (×10⁻³ SI)	P-wave velocity (m/s)	Electrical resistivity (Ωm)	NGR [CPS]: MSCL-W
				Sedi...	Litho...	Fossils	Biotu...	Muns...	Drilling Distur...						
227.000	CC														


904 VCD; 904-C9010D-27X; Depth 255.48–257.00(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Litho...
Fossils
Biotu...
Muns...
Drilling Disturba nce
Drilling Distur...
Comment
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
255.600
255.800
256.000
256.200
256.400
256.600
256.800
257.000
1
2
CC
sedimentology
At the drilling, NO CORE LINER was installed on this core. Section 1 was pushed out (or pulled out) stromgly from the core barell. Original structures (or perhaps their order) had been lost at the time. Section 2 was in the shoe part, but outer part was contaminated significantly.
Olive black silty sand, sometimes bearing scoria.
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000
30.000

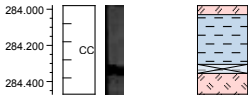

904 VCD; 904-C9010D-28X; Depth 264.98–266.11(mbsf)
CSF (m)
section index
X ray CT scan (section)
Lithology
Sedimentary Structure
Sedi...
Litho...
Fossils
Biotu...
Muns...
Drilling Disturba nce
Drilling Distur...
Comment
sedimentology
This core mainly consist of olive black sandy silt with several volcanic sediments.
GRA density (g/cm³)
Magnetic susceptibility (×10□³ SI)
P-wave velocity (m/s)
Electrical resistivity (Ωm)
NGR [CPS]: MSCL-W
265.000
265.200
265.400
265.600
265.800
266.000
1
CC
1.00
1.50
0.00
500.00
1000
1500
0
2
4
0.000
10.000
20.000
30.000

904 VCD; 904-C9010D-29X; Depth 274.48–274.49(mbsf, CMP)

CSF (m)	Lithology	Sedimentary Structure				Drilling Disturbance	Comment	GRA density (g/cm³)	Magnetic susceptibility (×10□³ SI)	P-wave velocity (m/s)	Electrical resistivity (Ωm)	NGR [CPS]: MSCL-W
		Sedi...	Lithol...	Fossils	Biotu...	Muns...	Drilling Distur...					
274.482							**sedimentology** Core catcher sample of a scoria grain (5 mm).					
274.484												
274.486												
274.488												

904 VCD; 904-C9010D-30X; Depth 283.98–284.47(mbsf)

CSF (m)	section index	X ray CT scan (section)	Lithology	Sedimentary Structure					Drilling Disturbance	Comment	GRA density (g/cm³)	Magnetic susceptibility (×10⁻³ SI)	P-wave velocity (m/s)	Electrical resistivity (Ωm)	NGR [CPS]: MSCL-W
				Sedi...	Litho...	Fossils	Biotu...	Muns...	Drilling Distur...						

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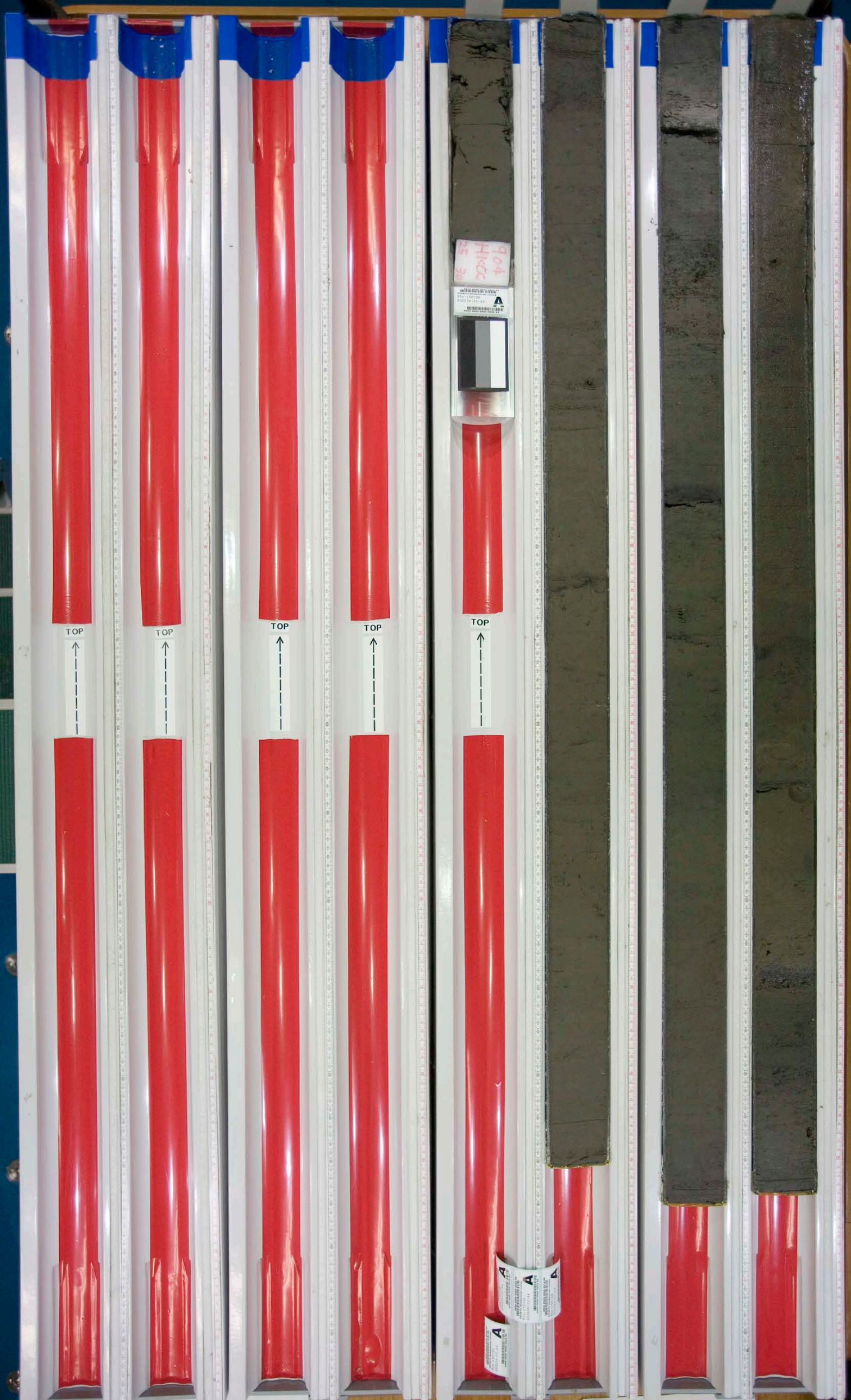
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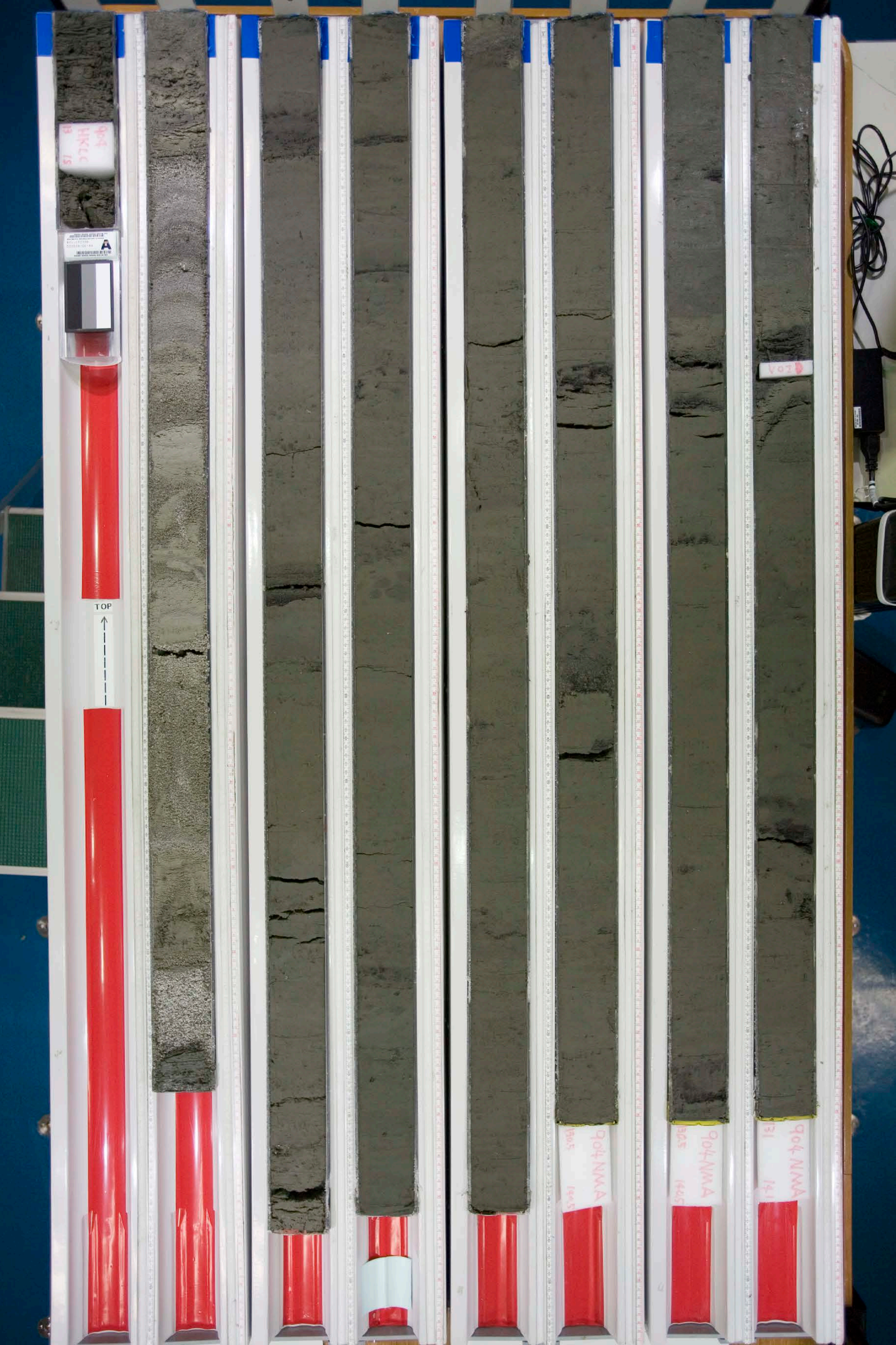
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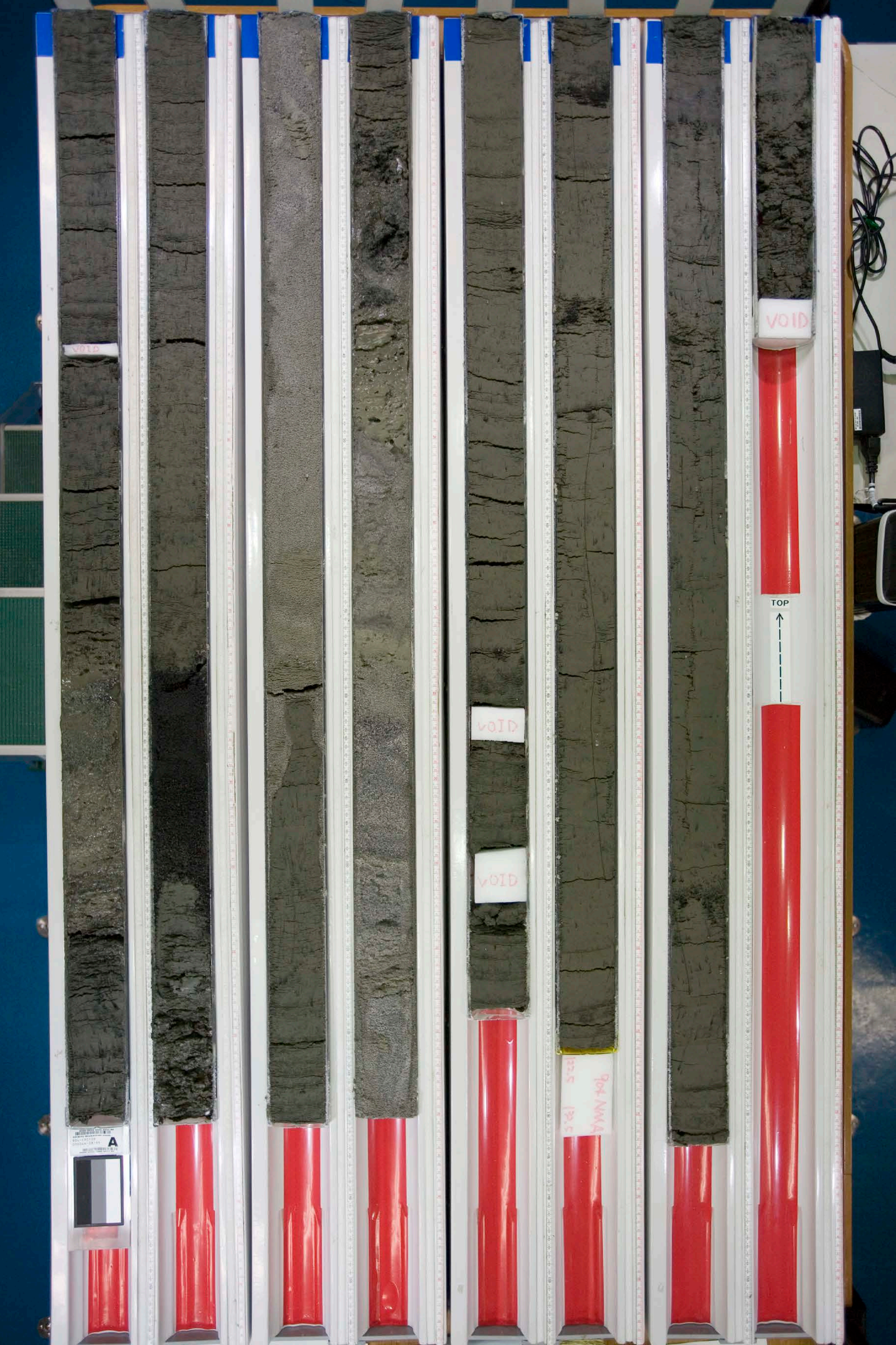
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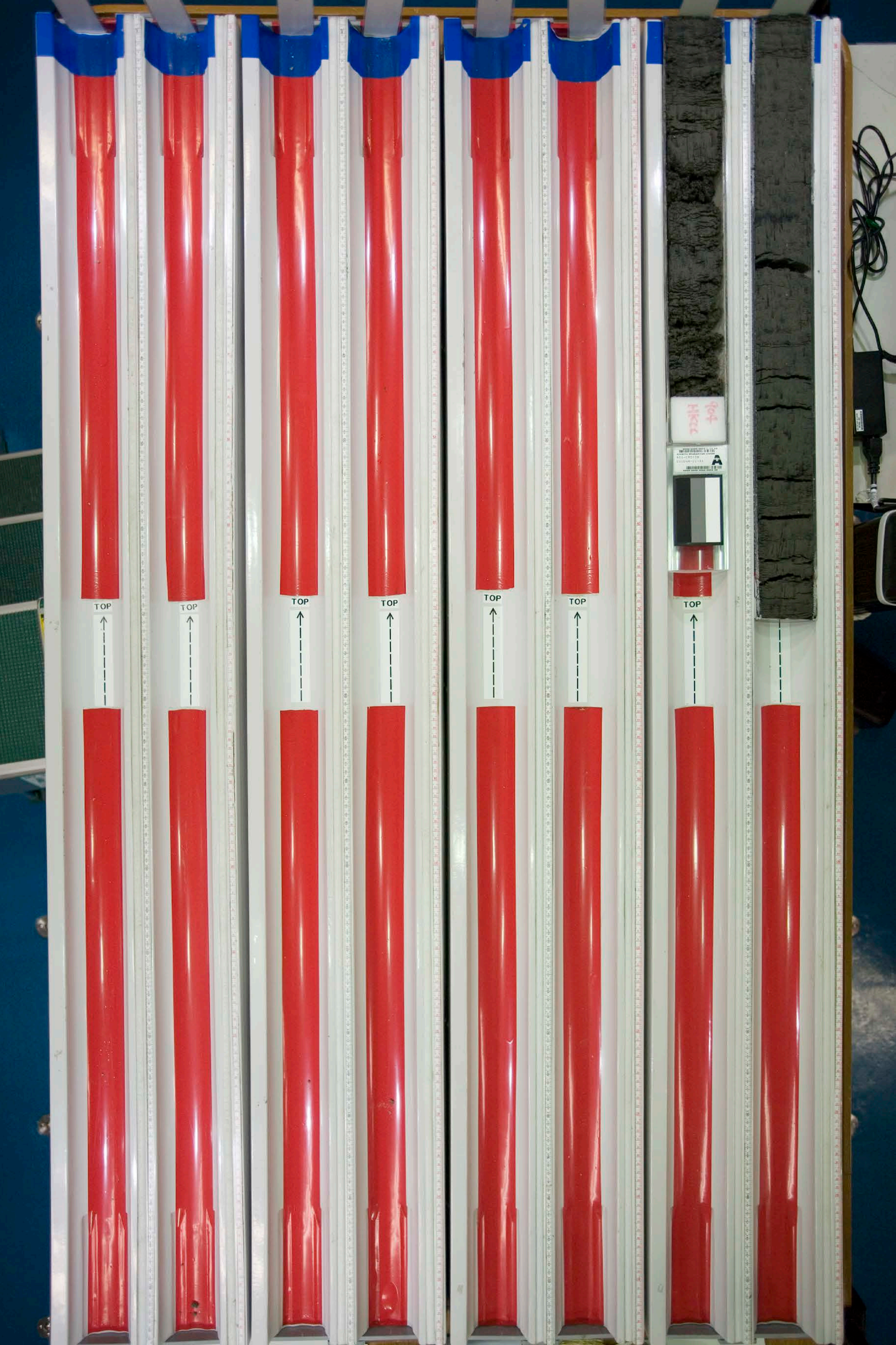
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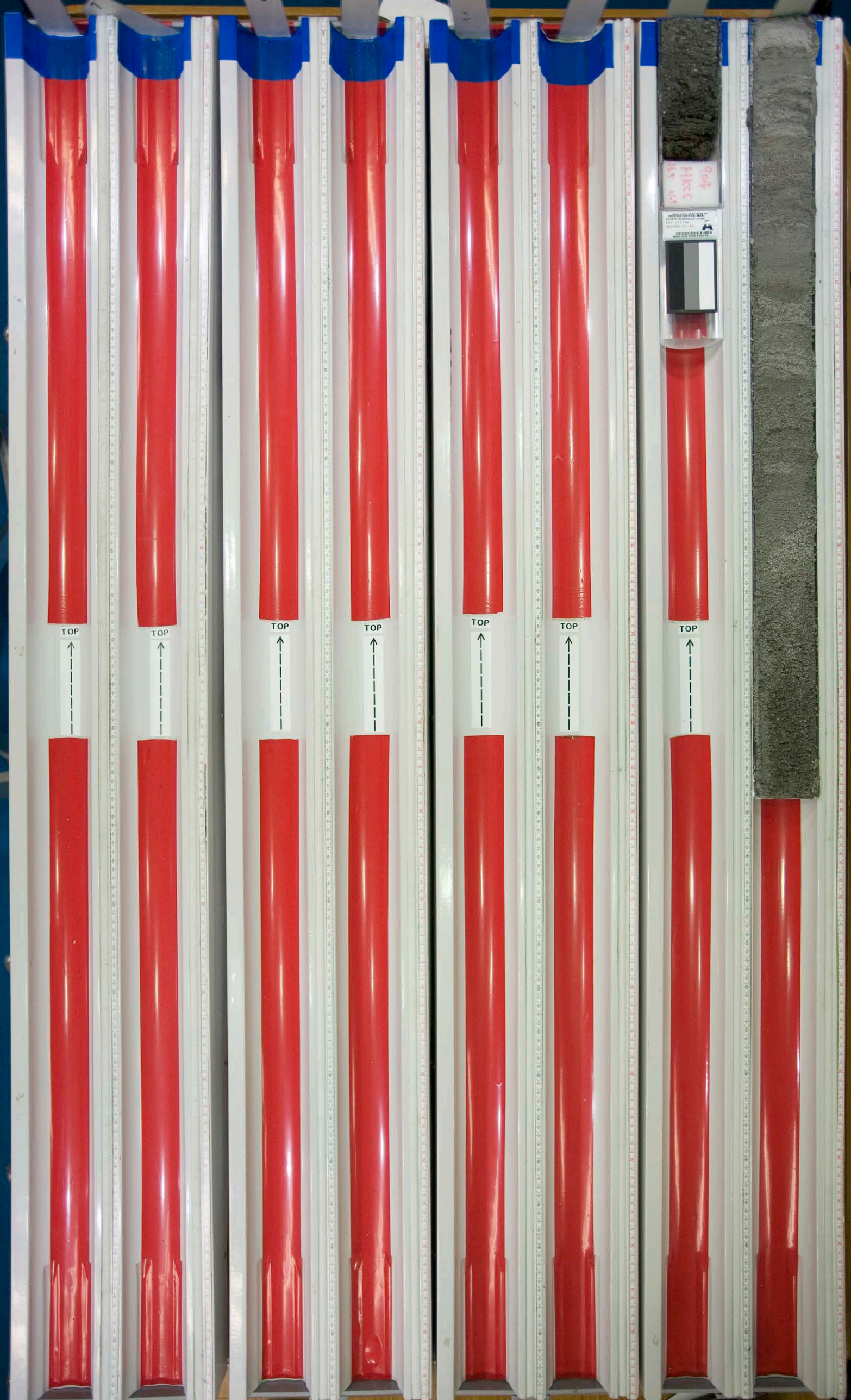
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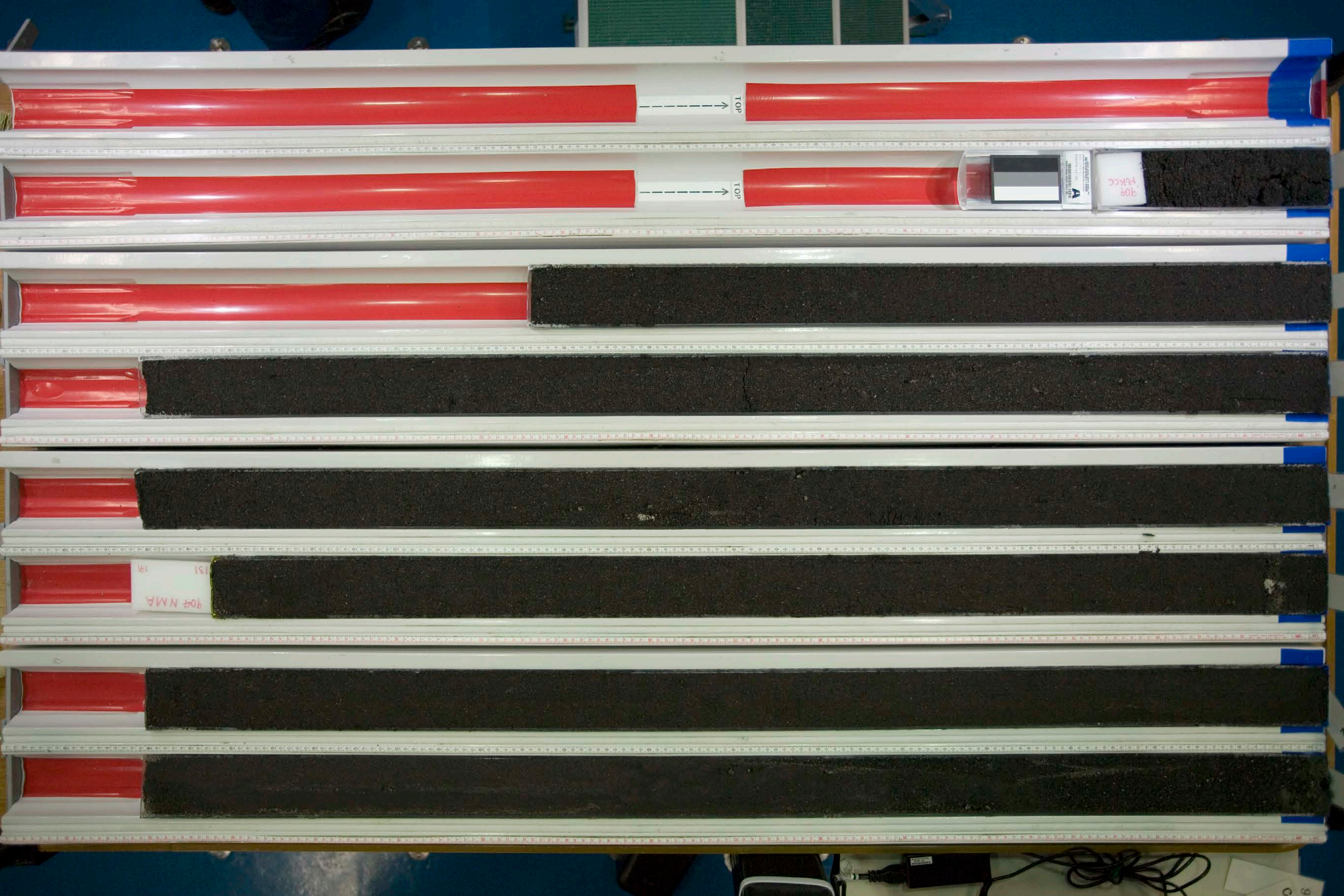
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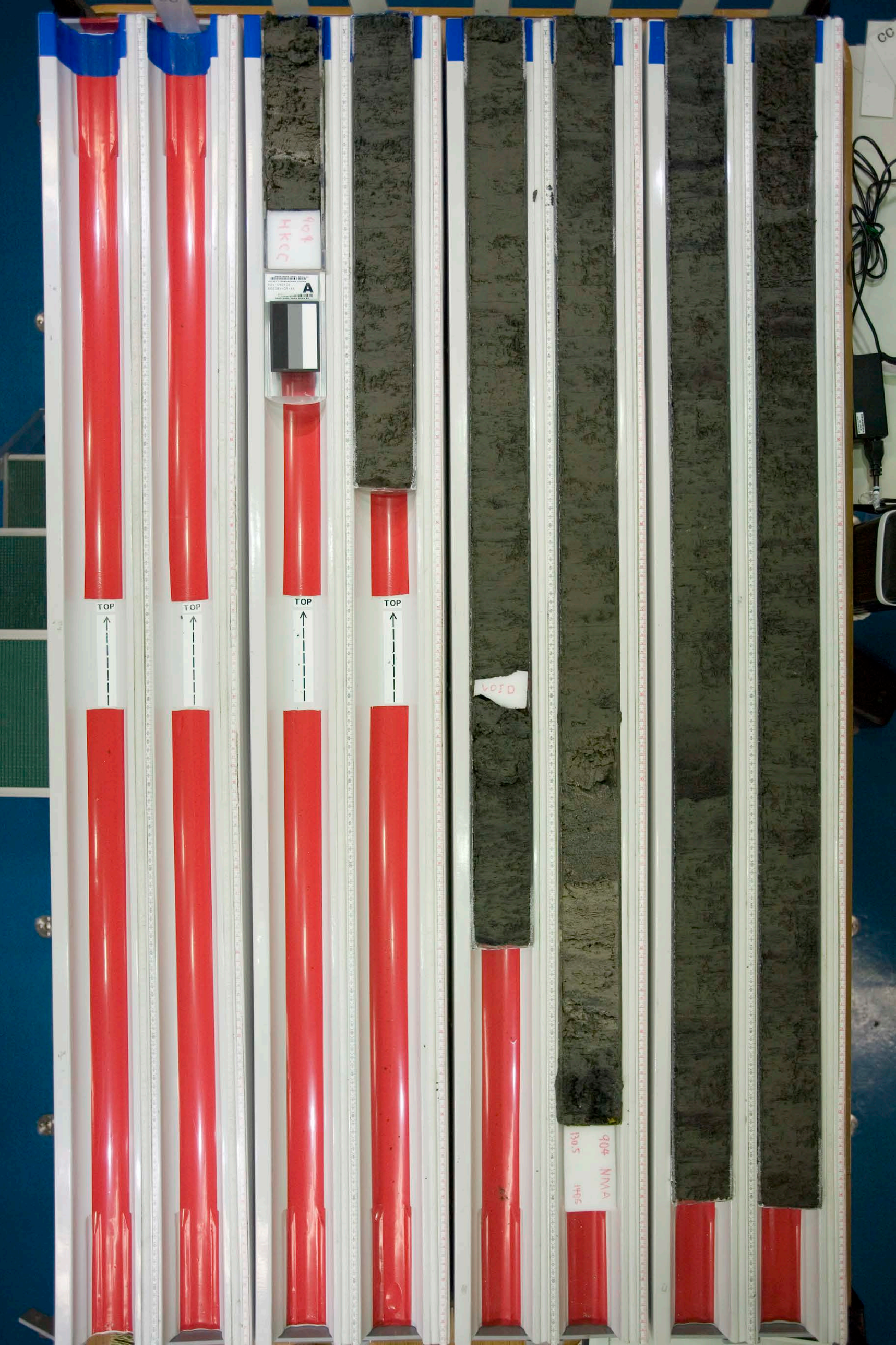
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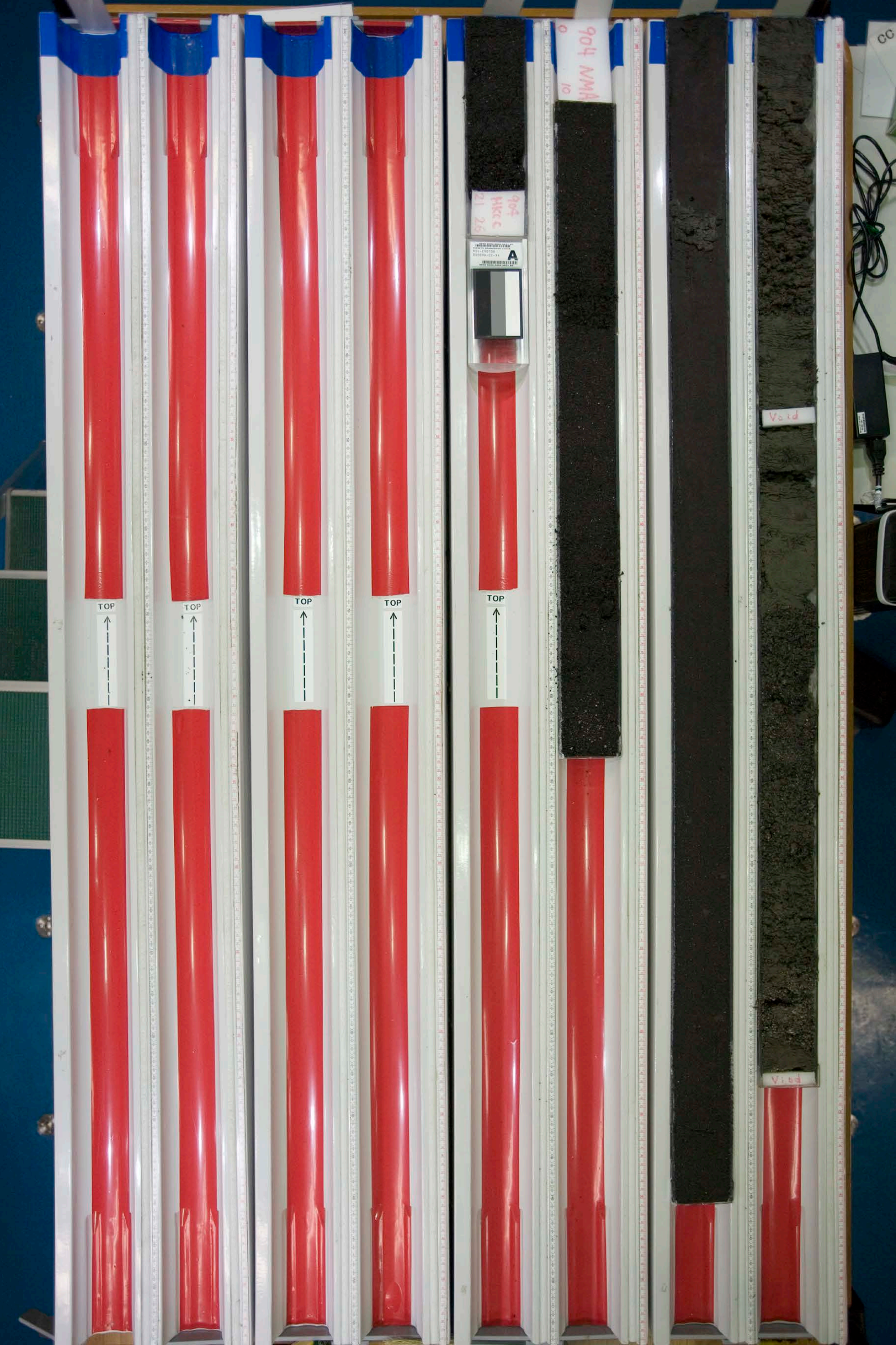
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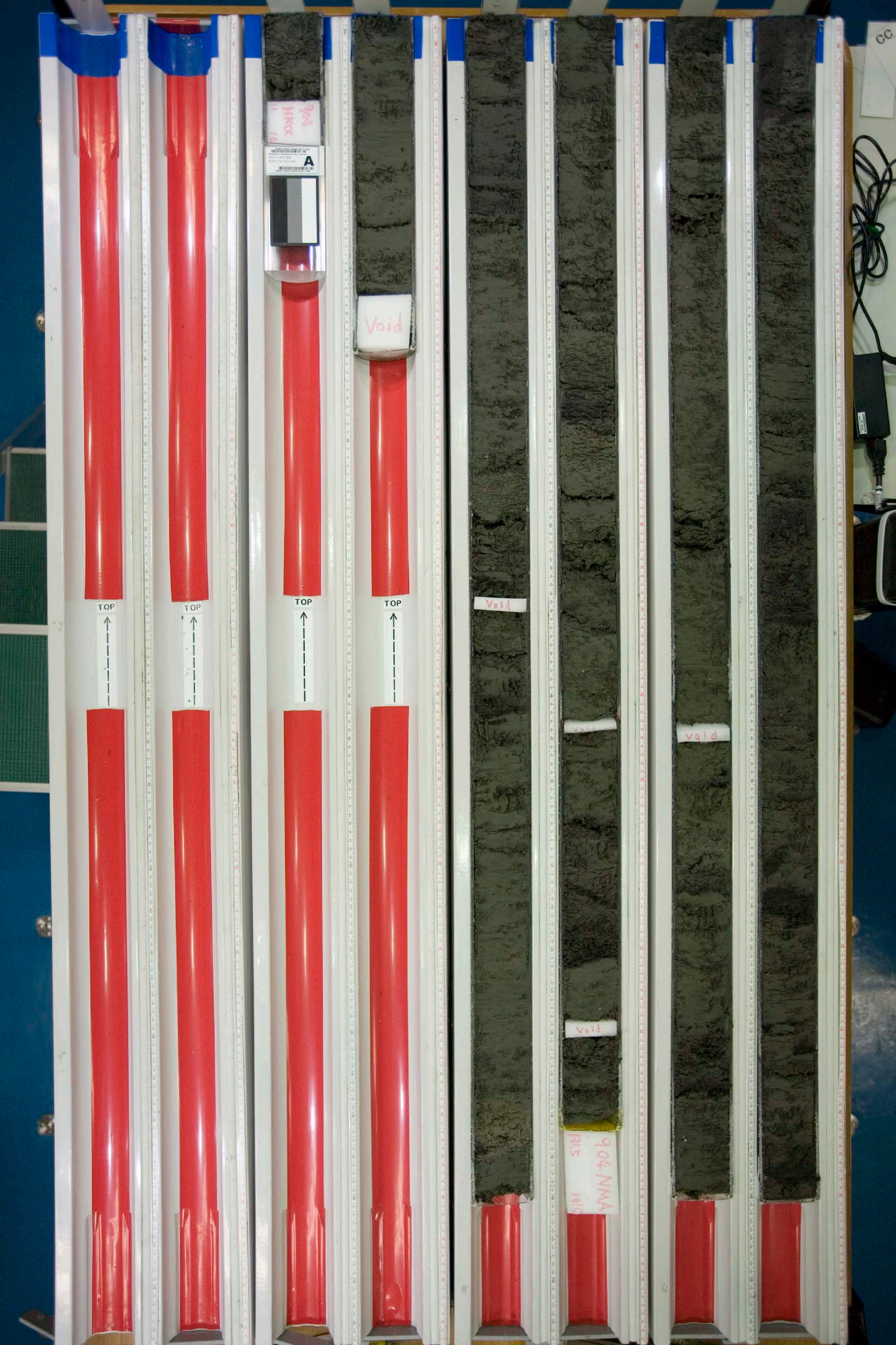
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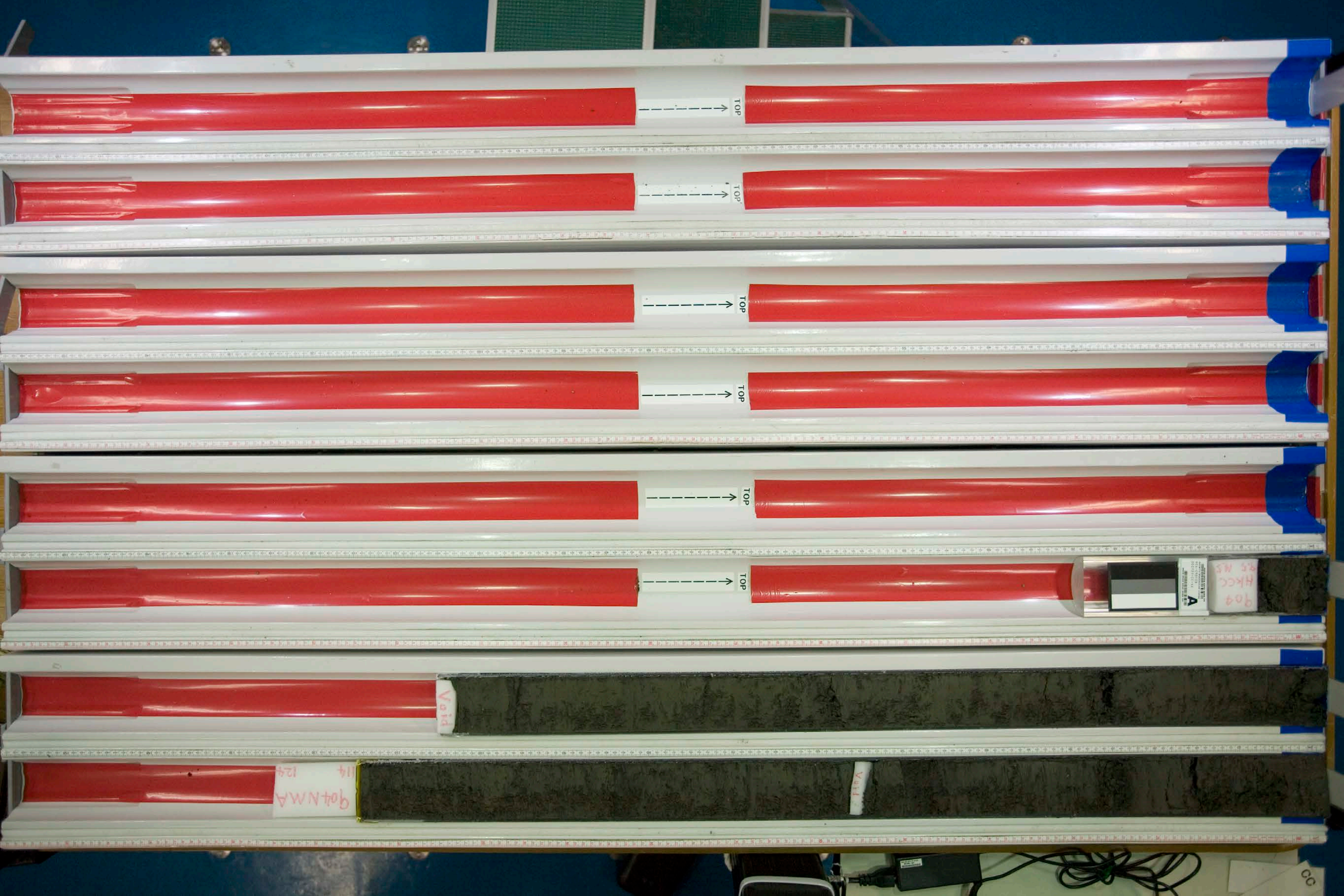
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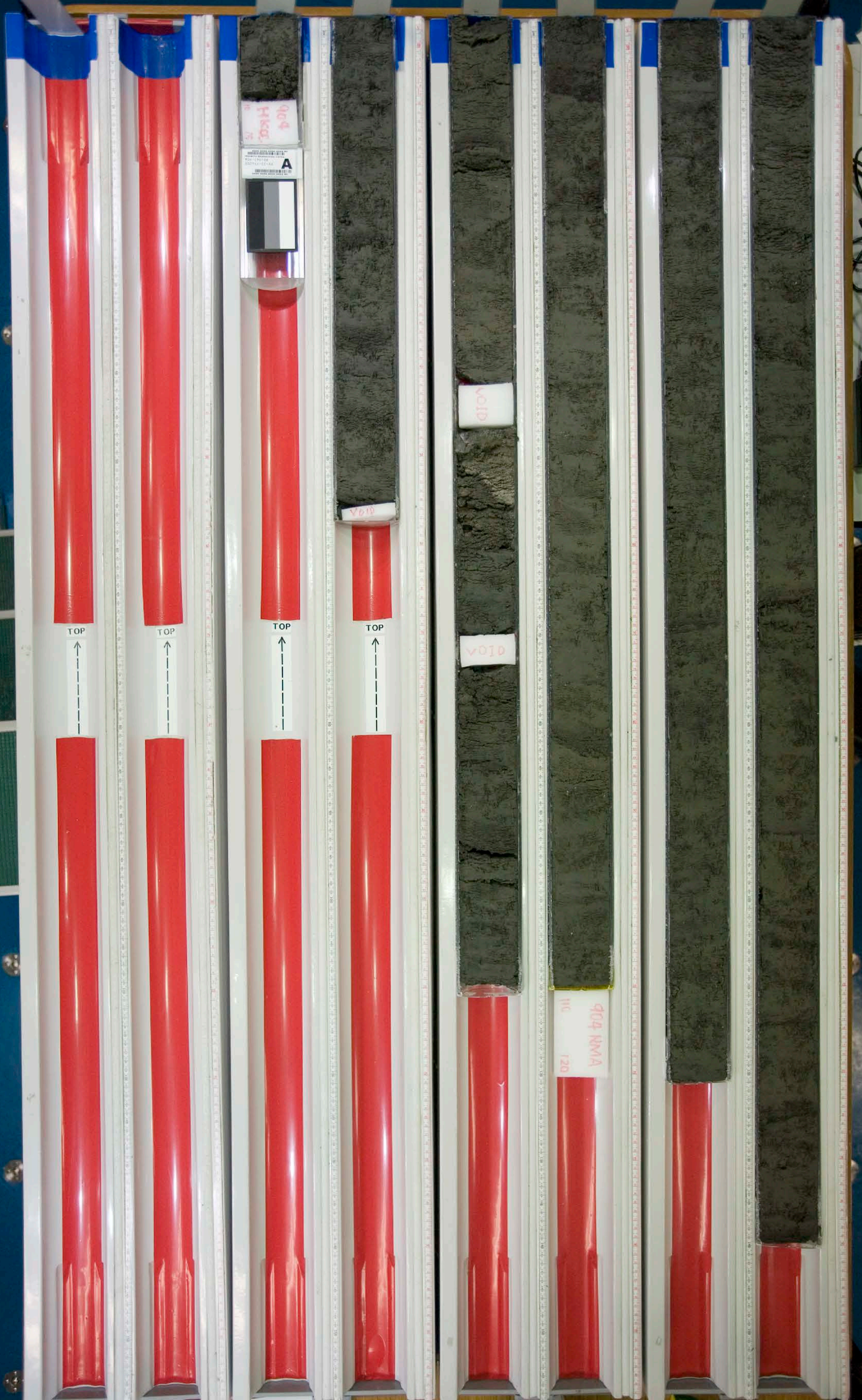
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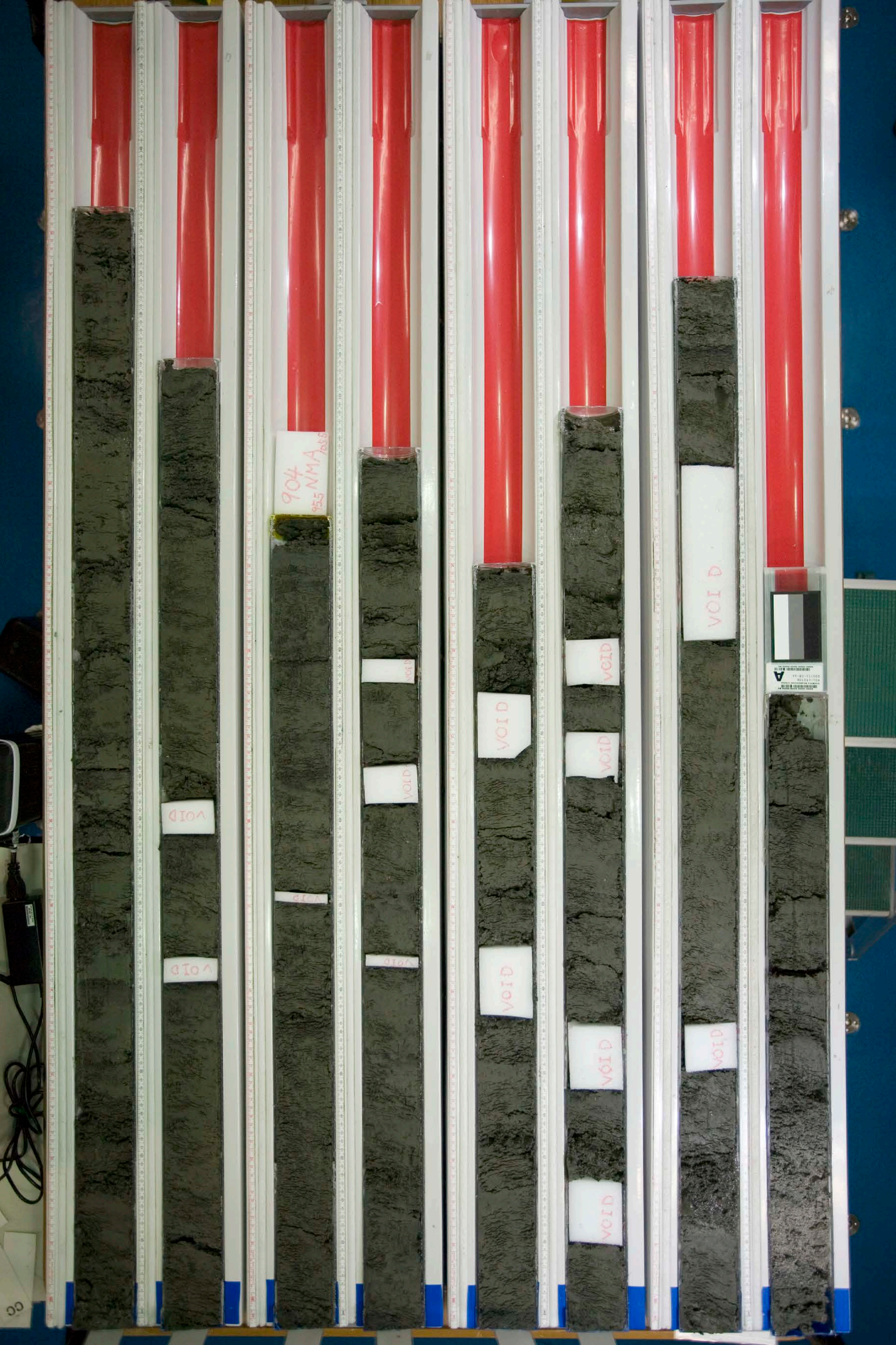
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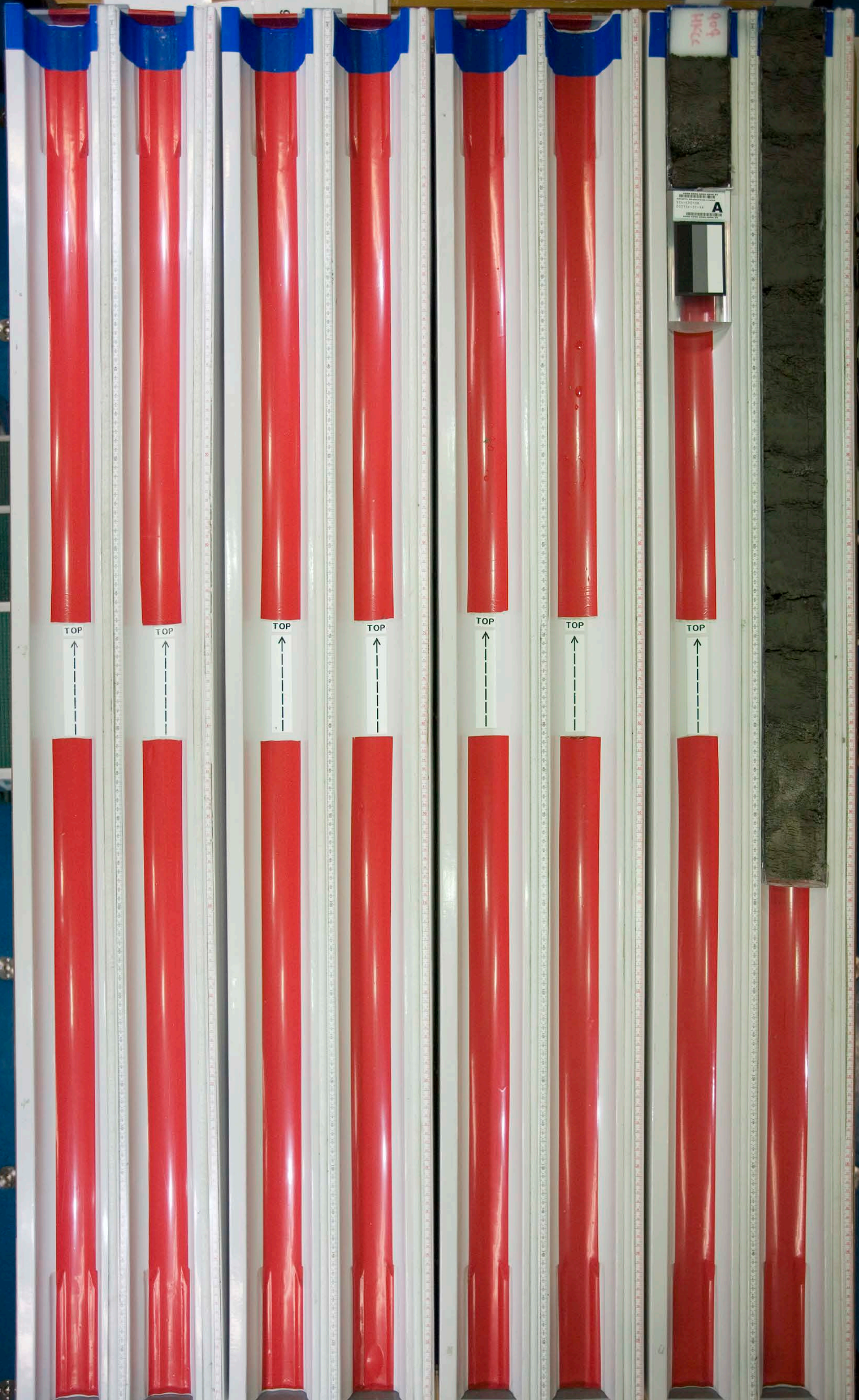
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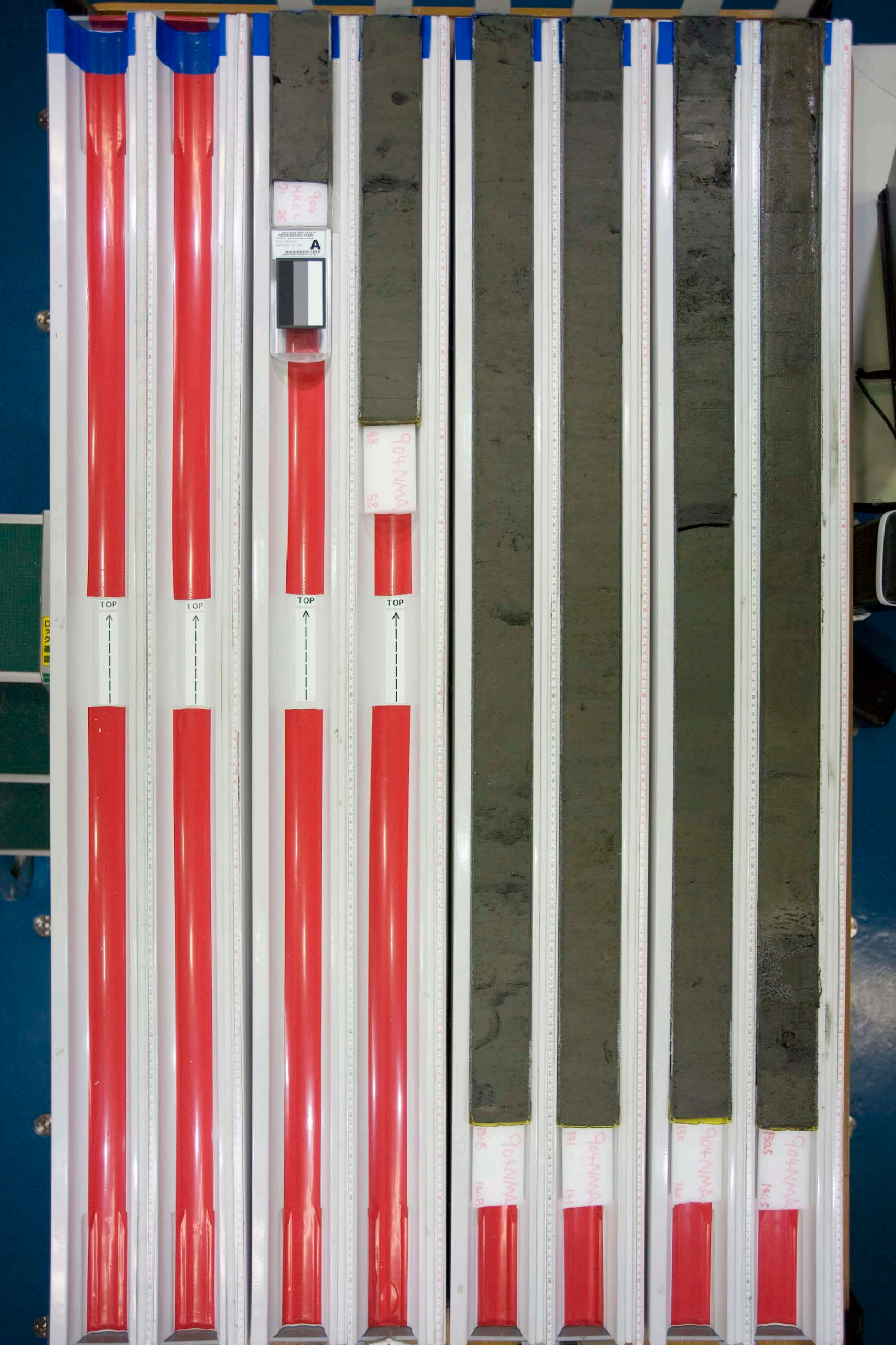
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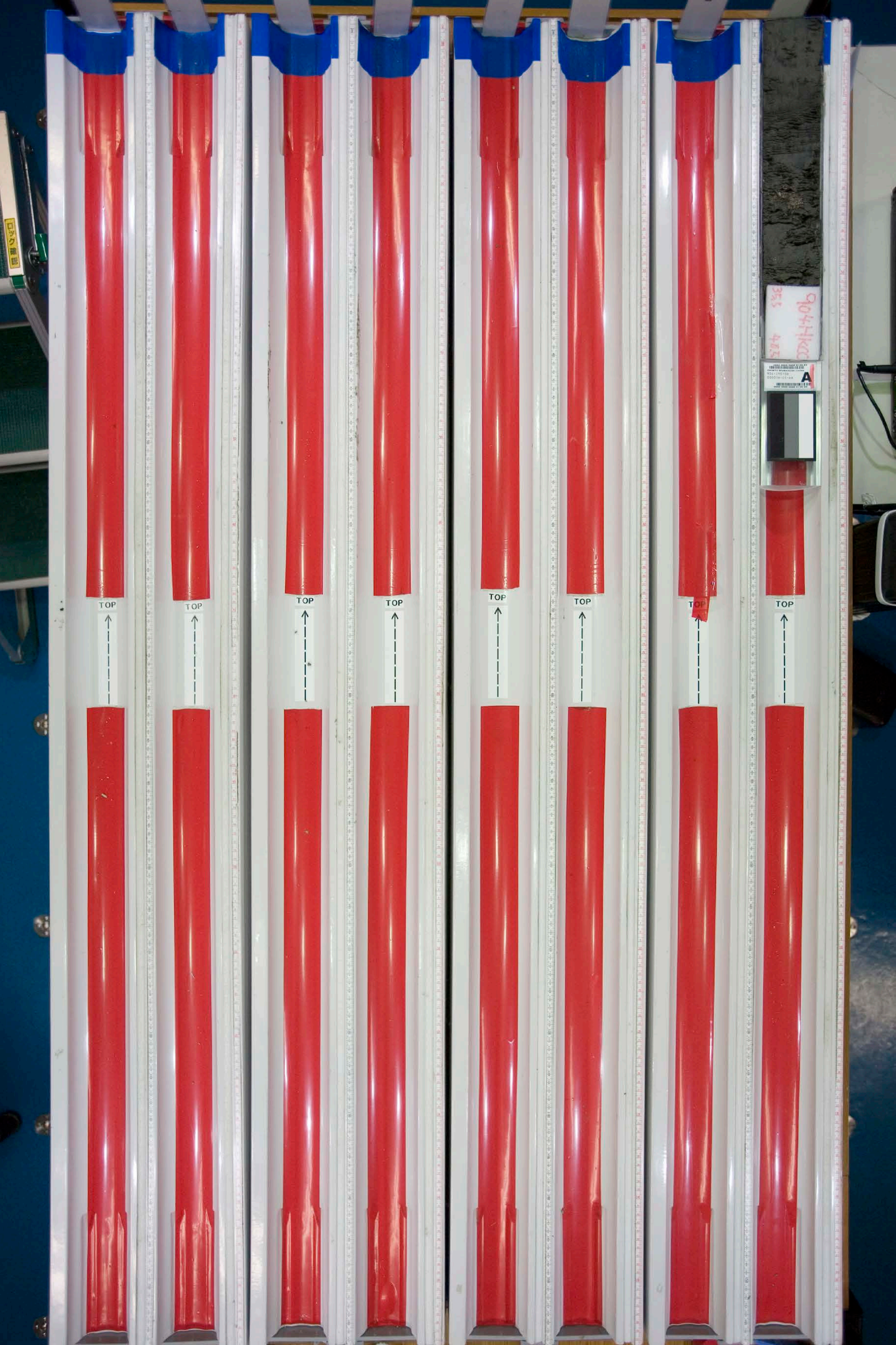
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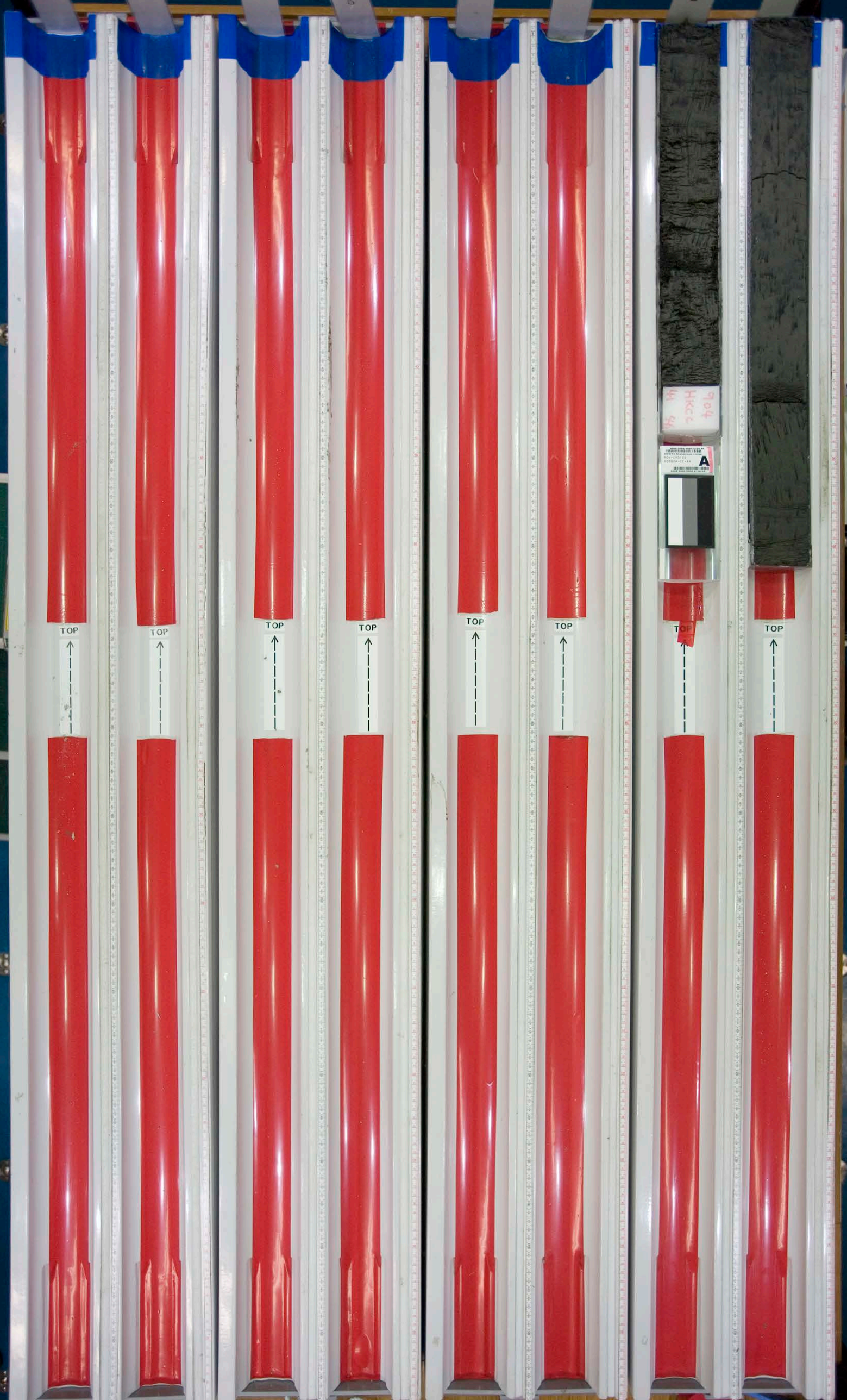
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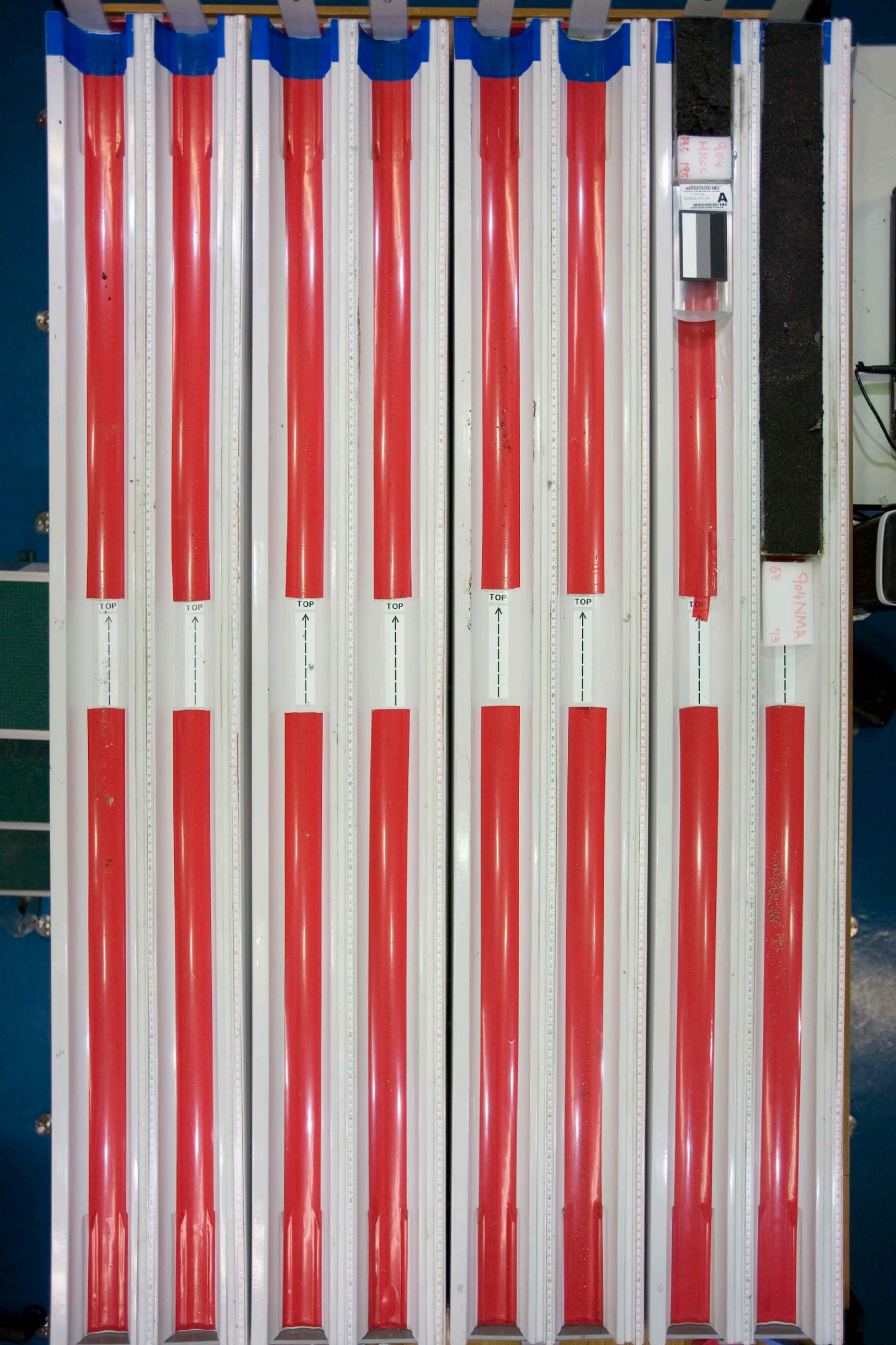
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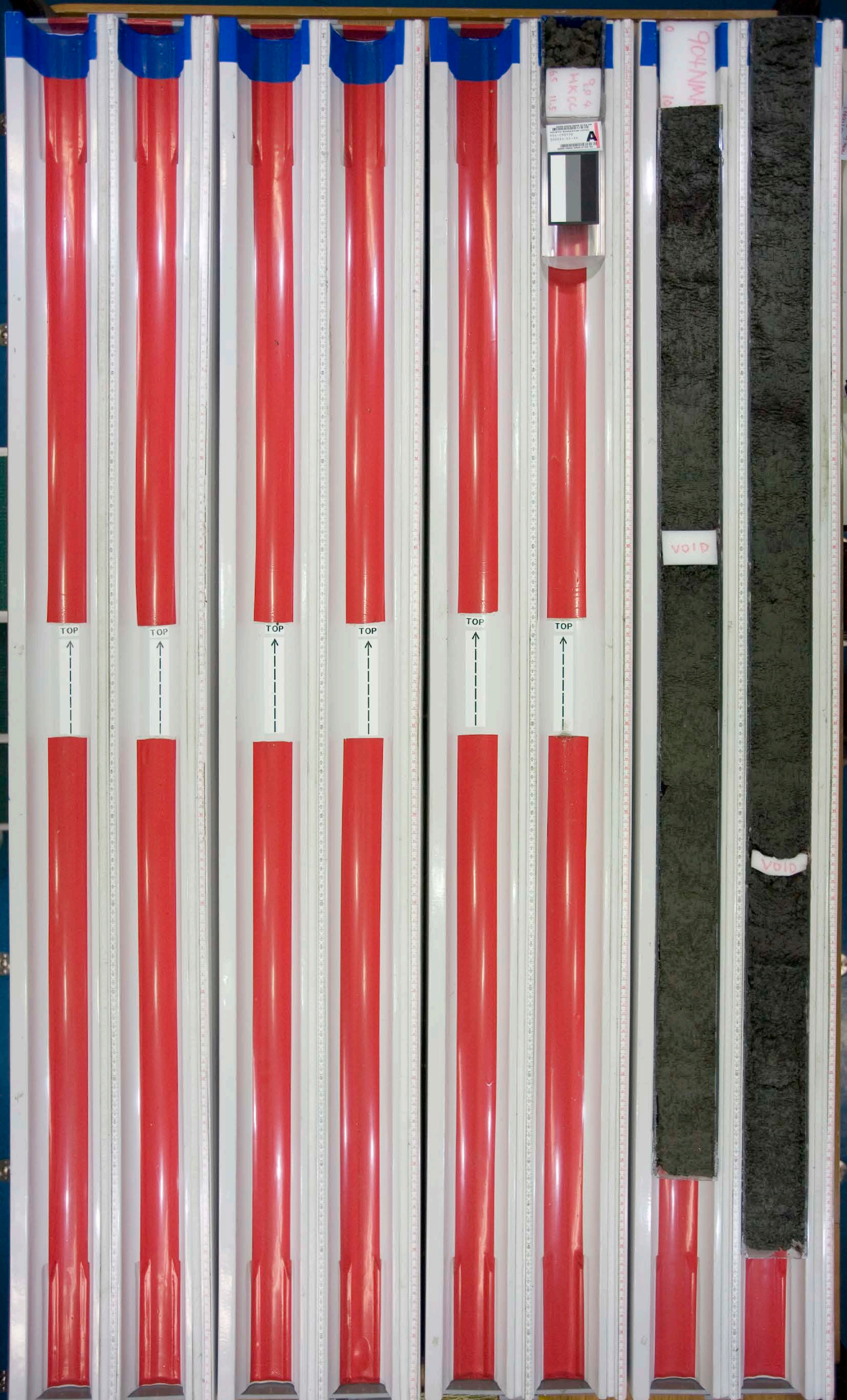
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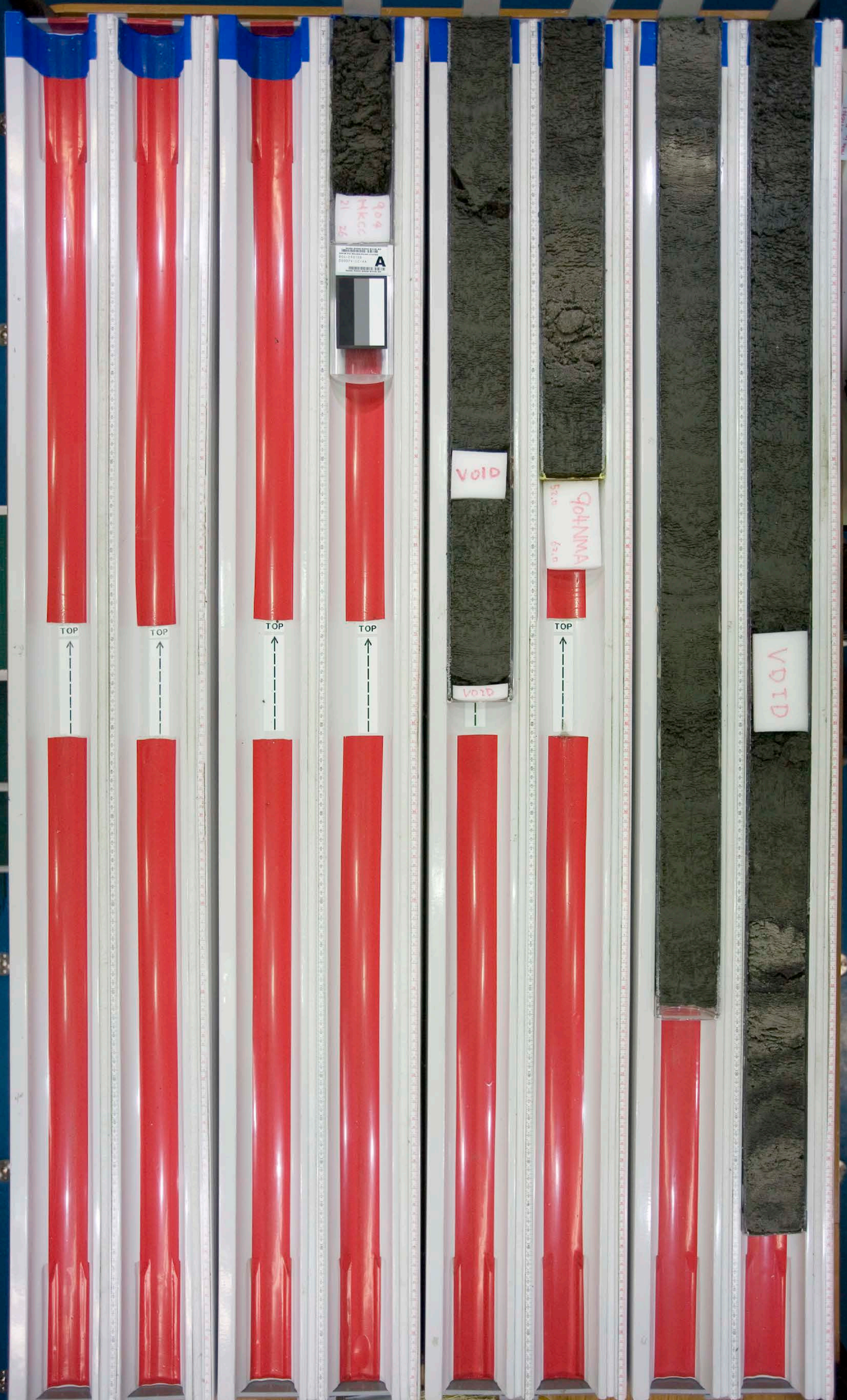
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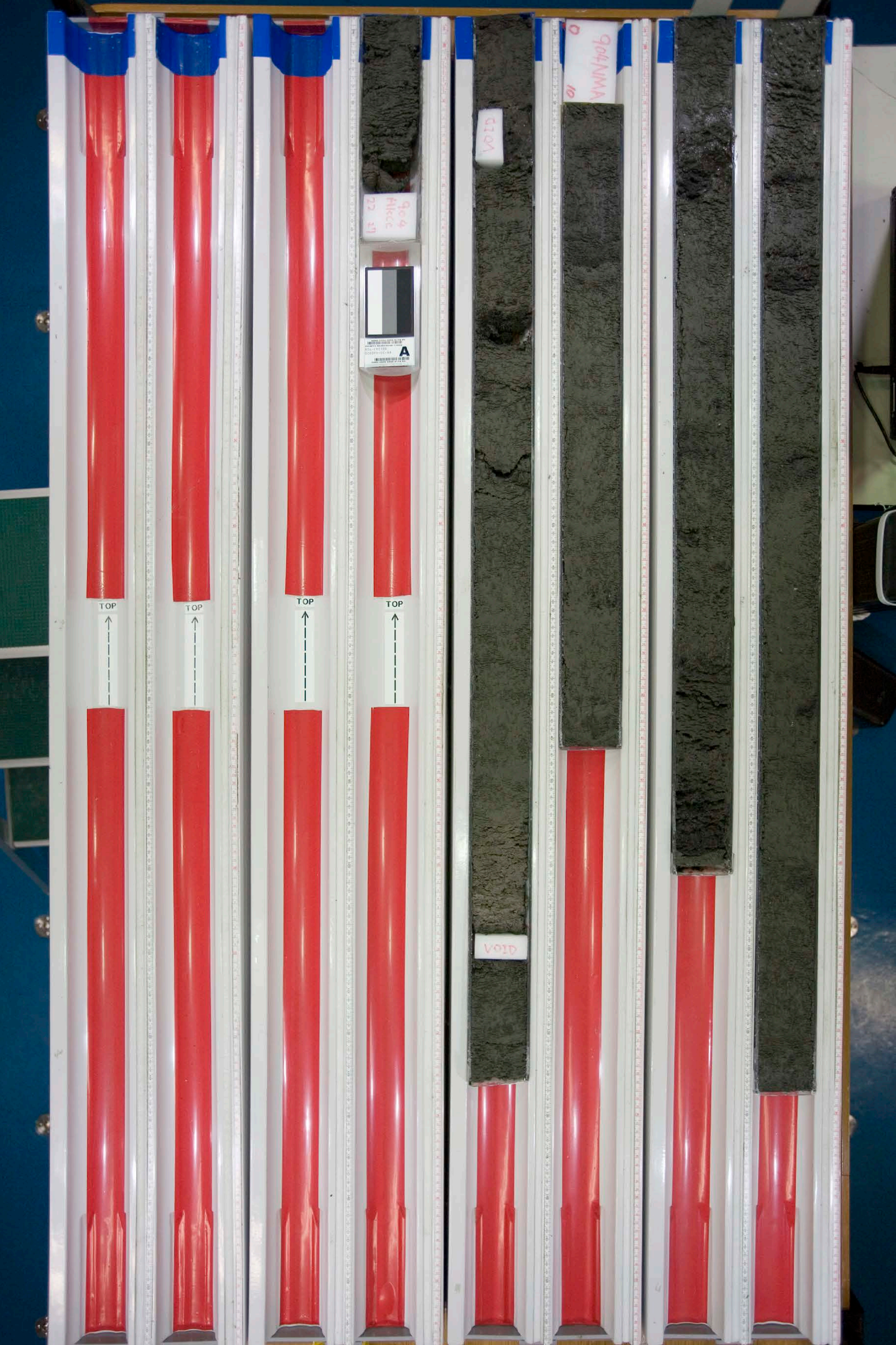
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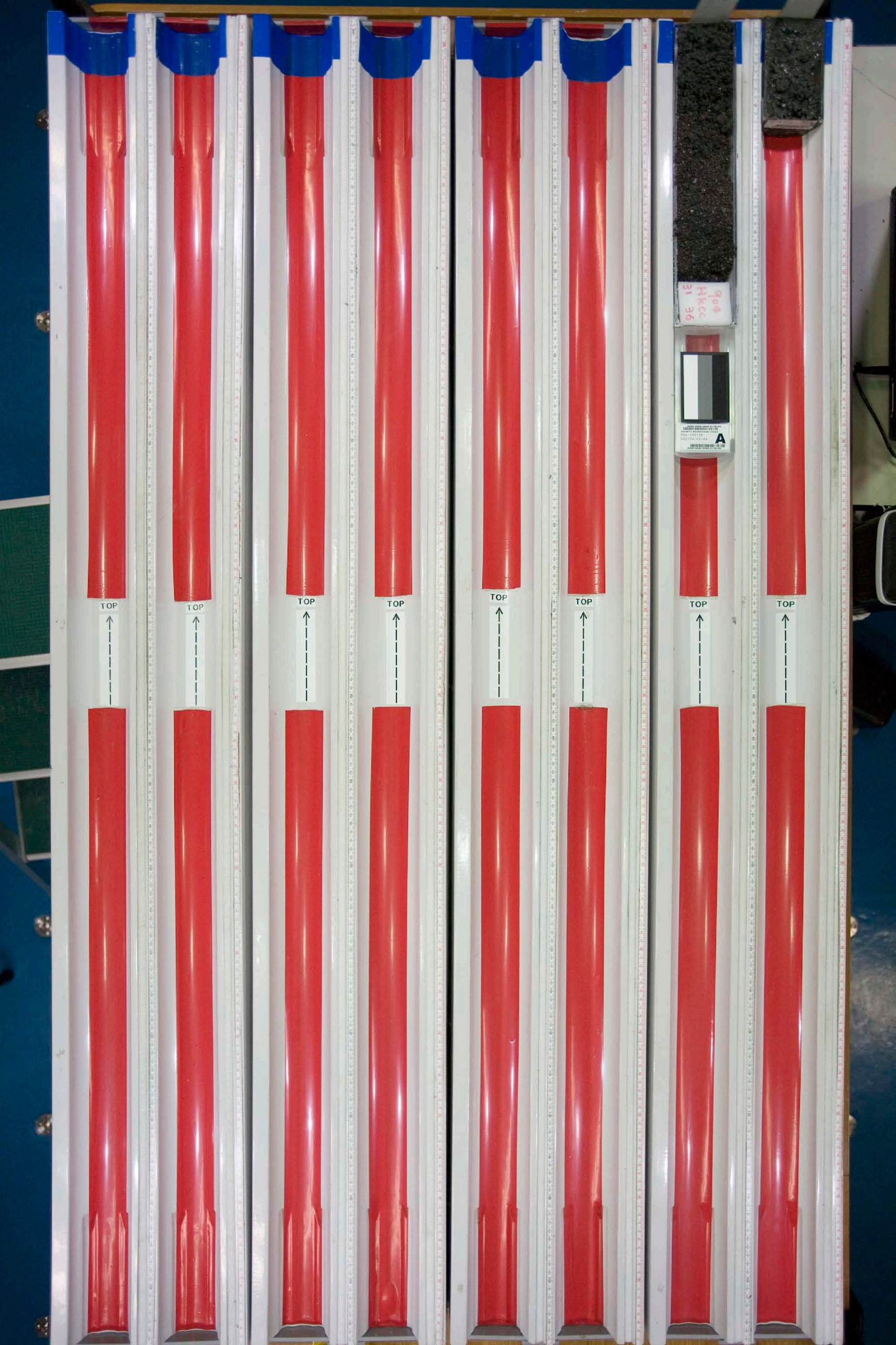
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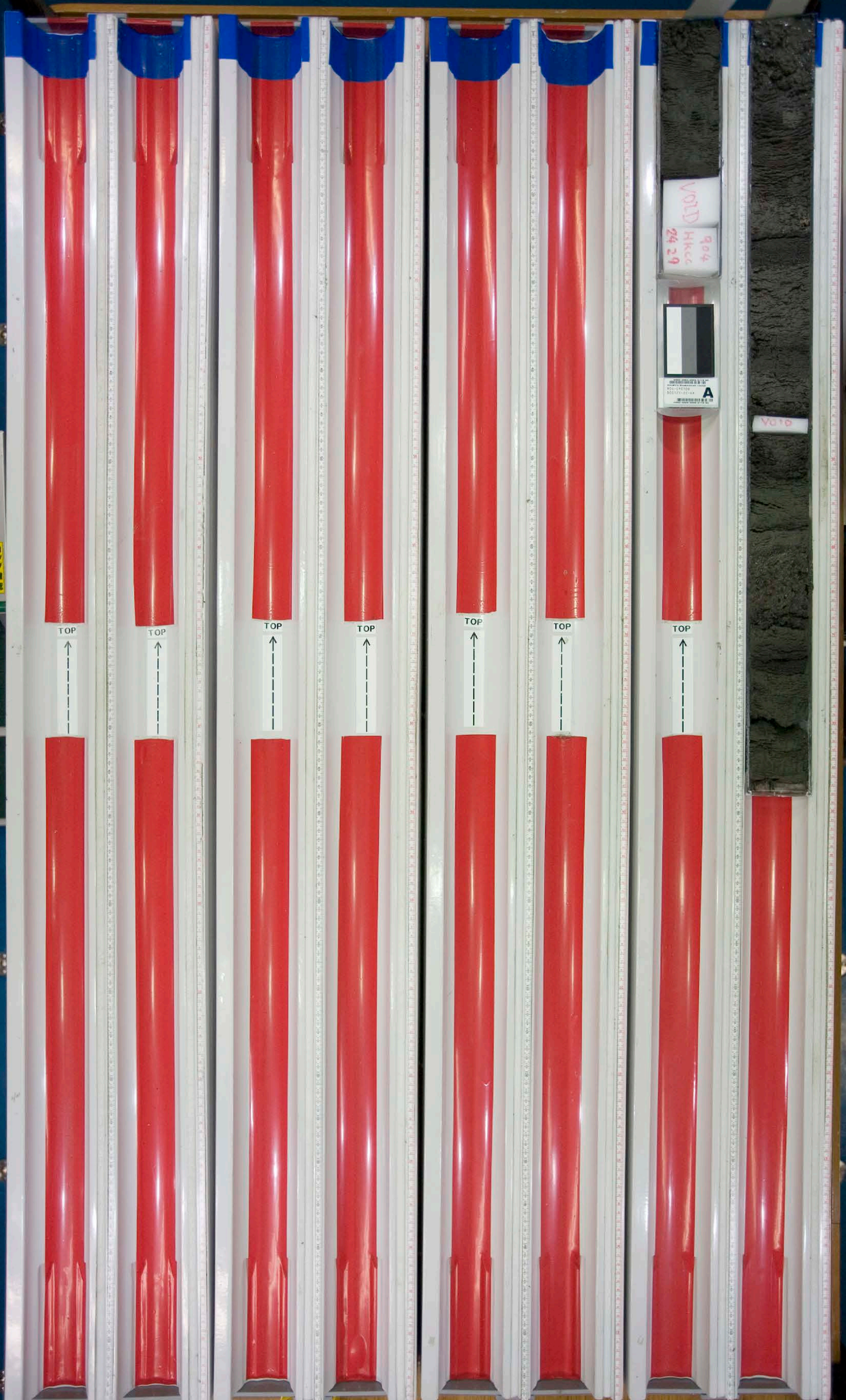
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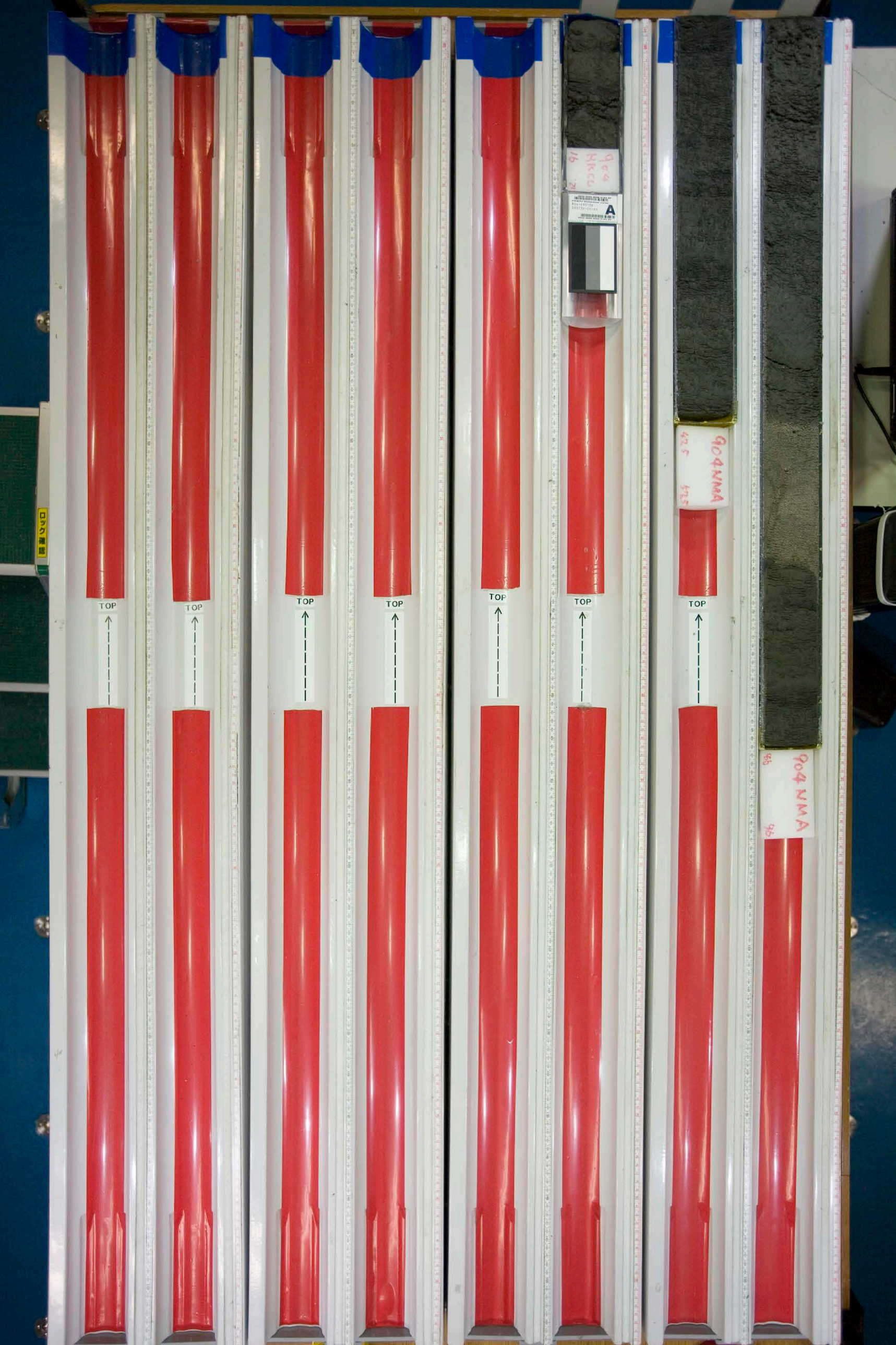
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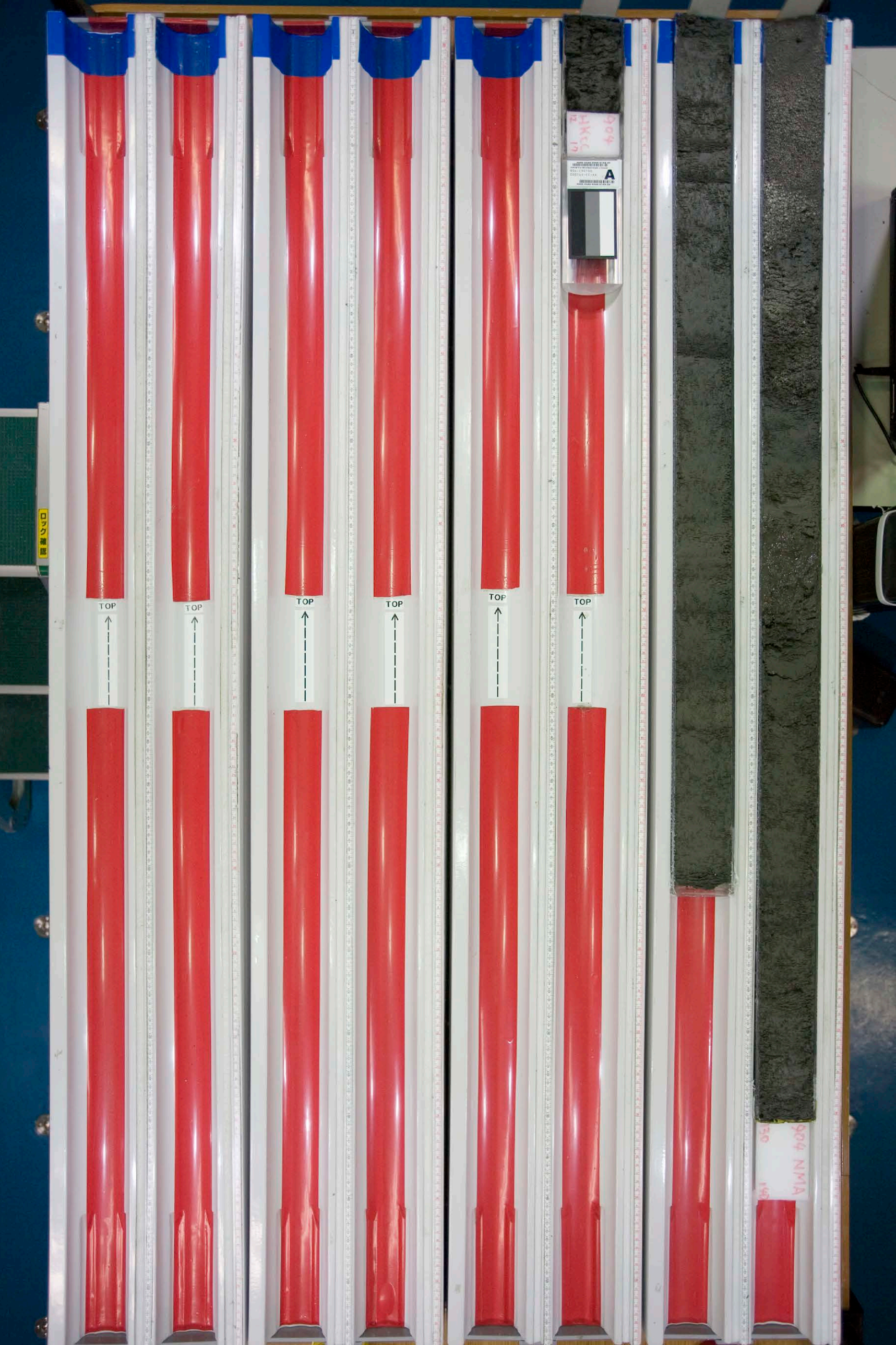
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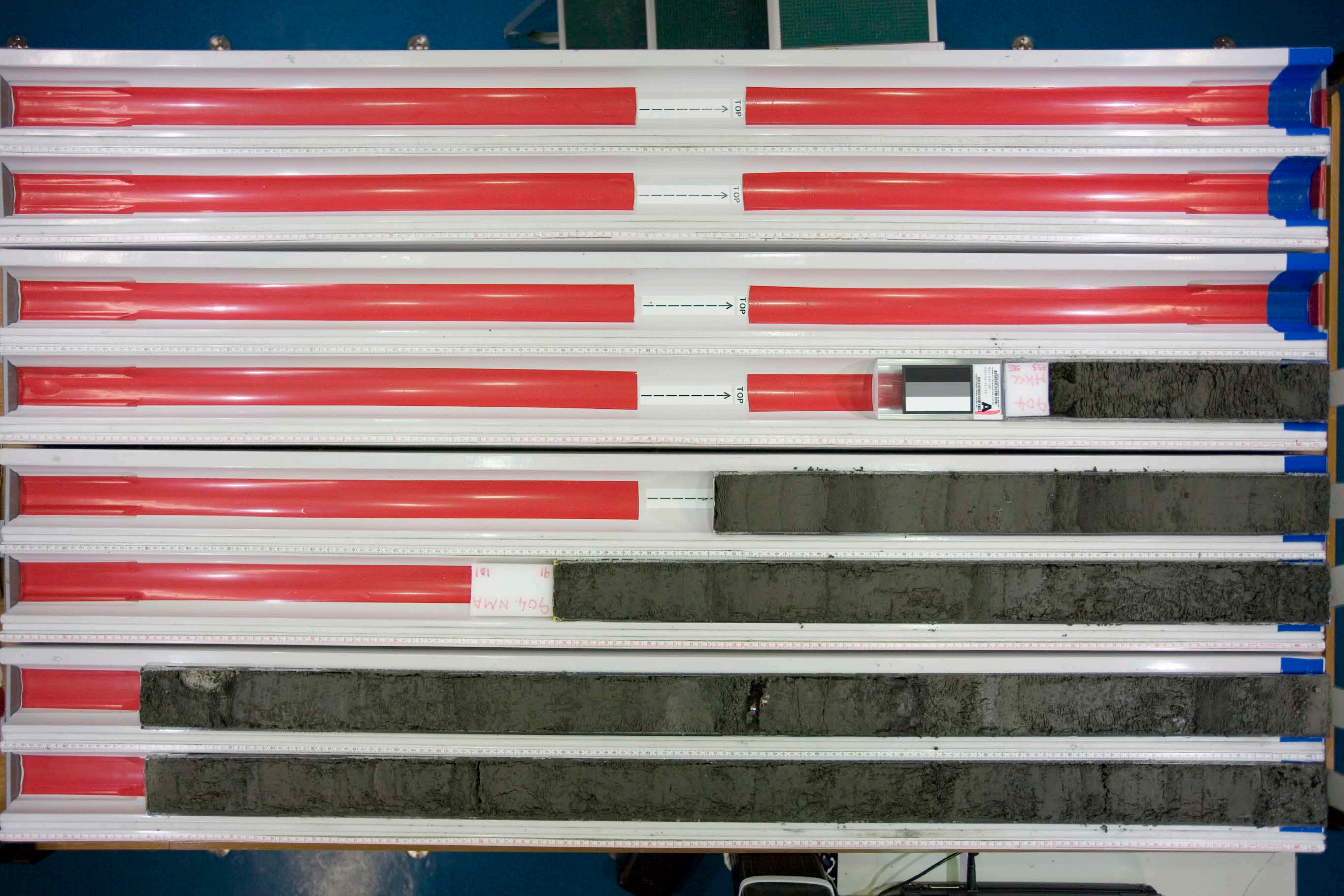
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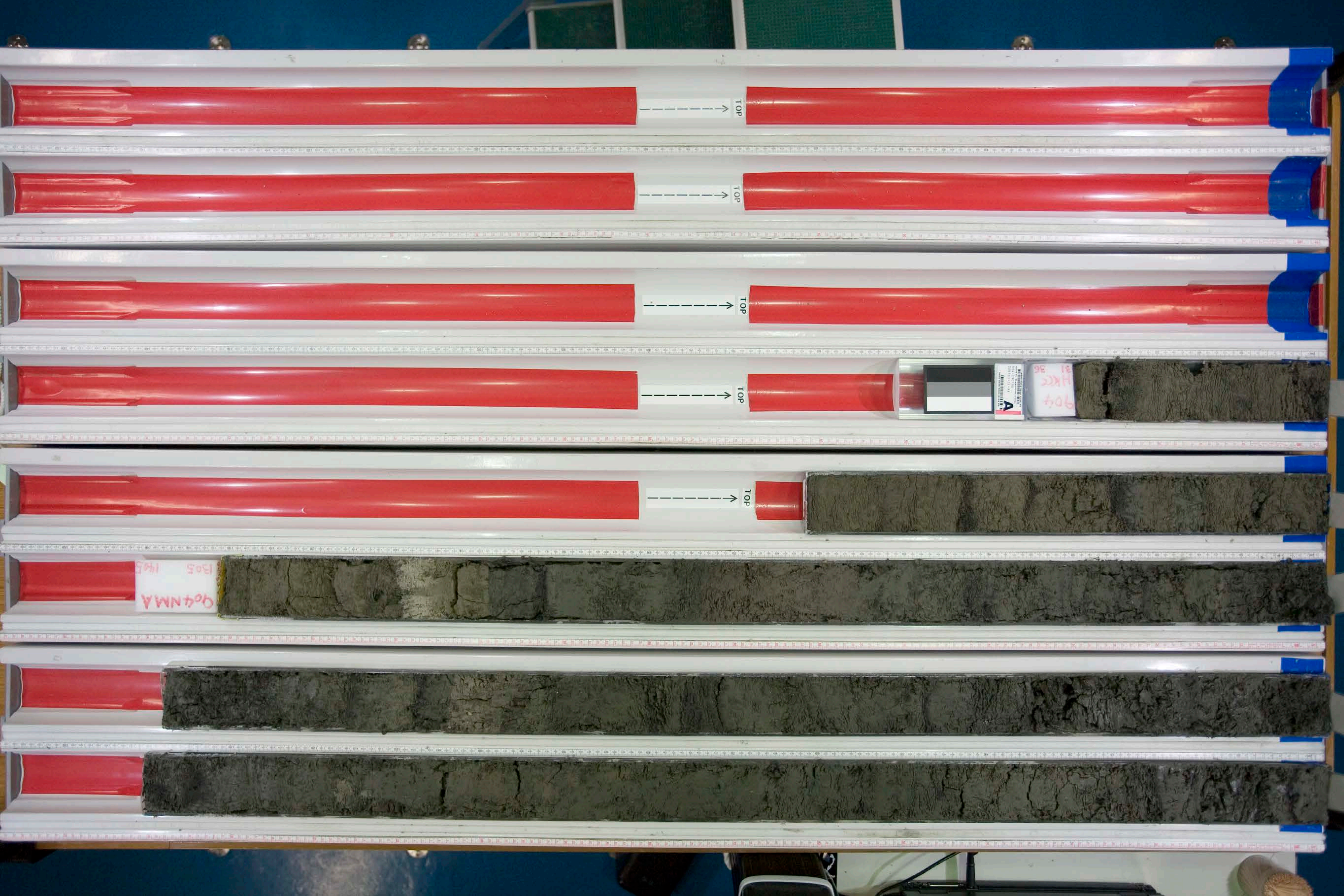
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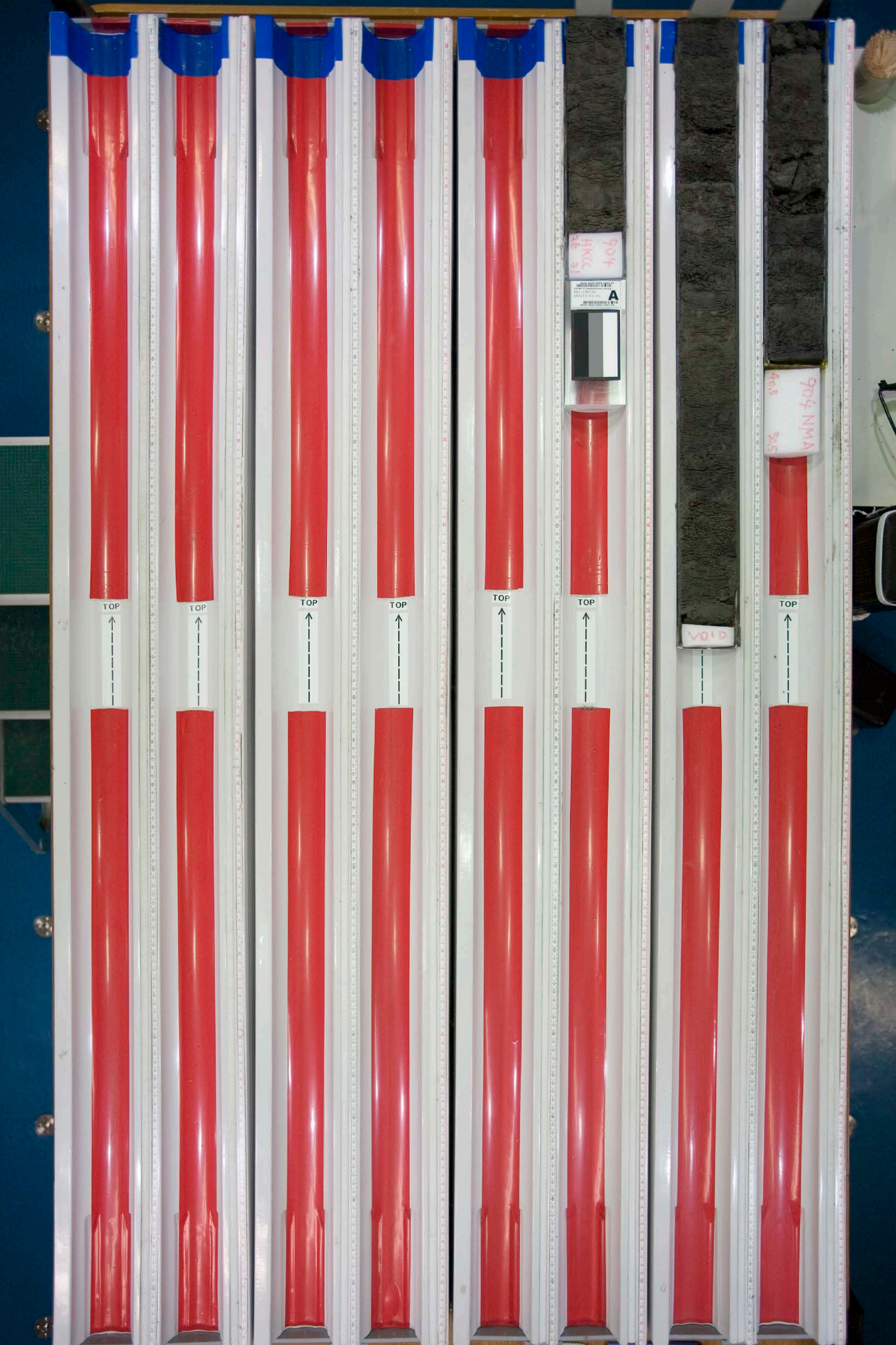
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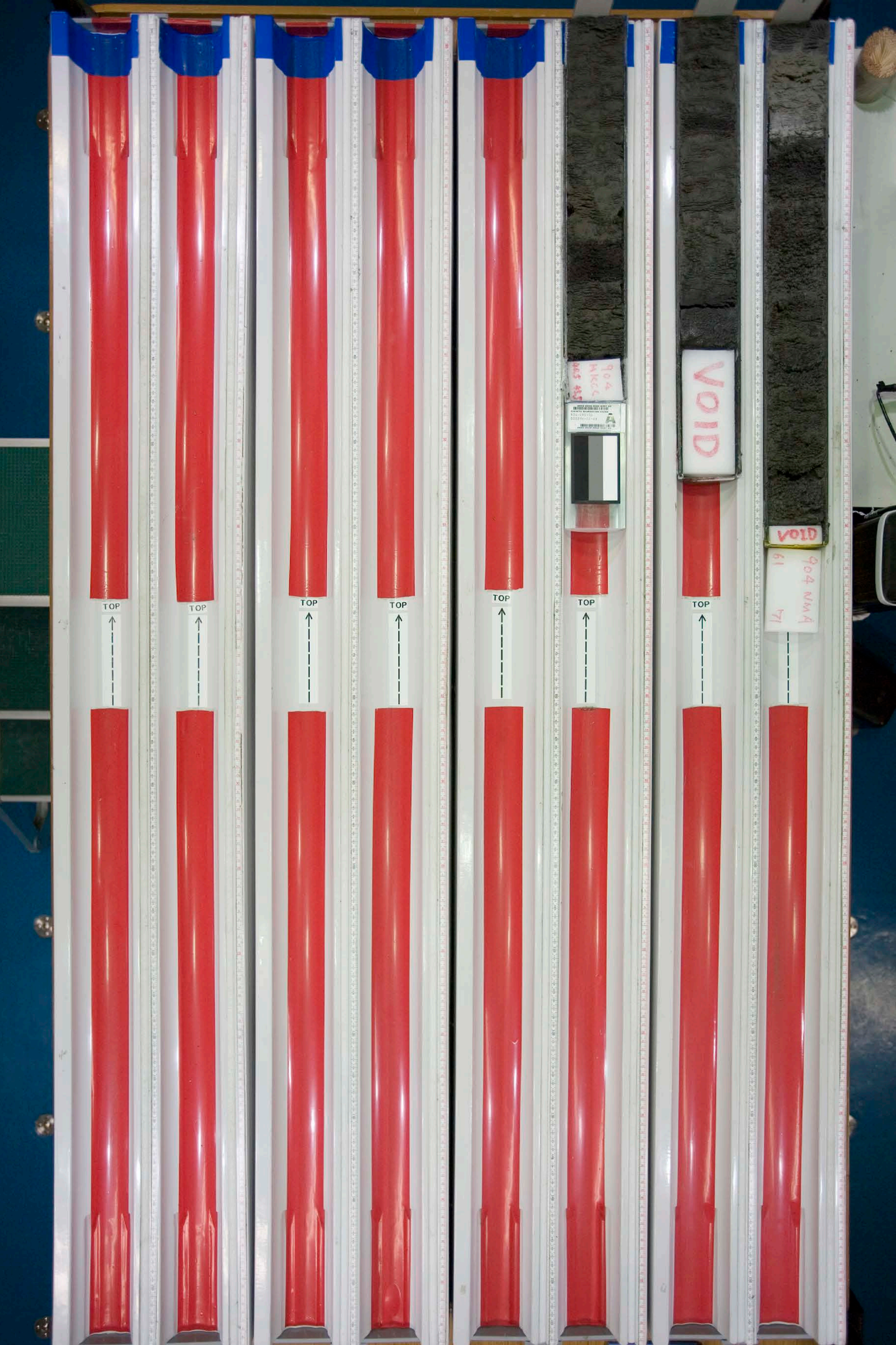
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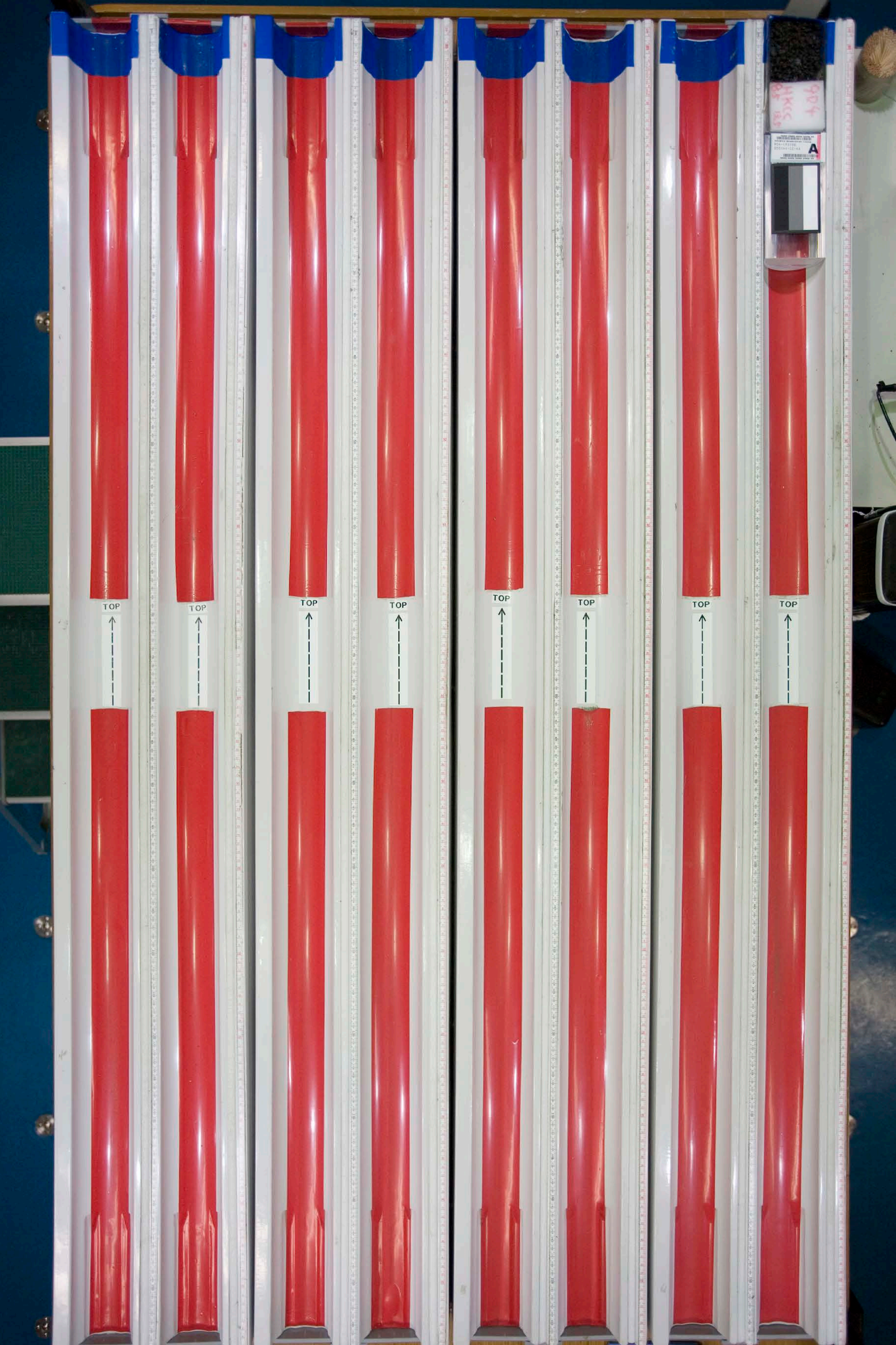
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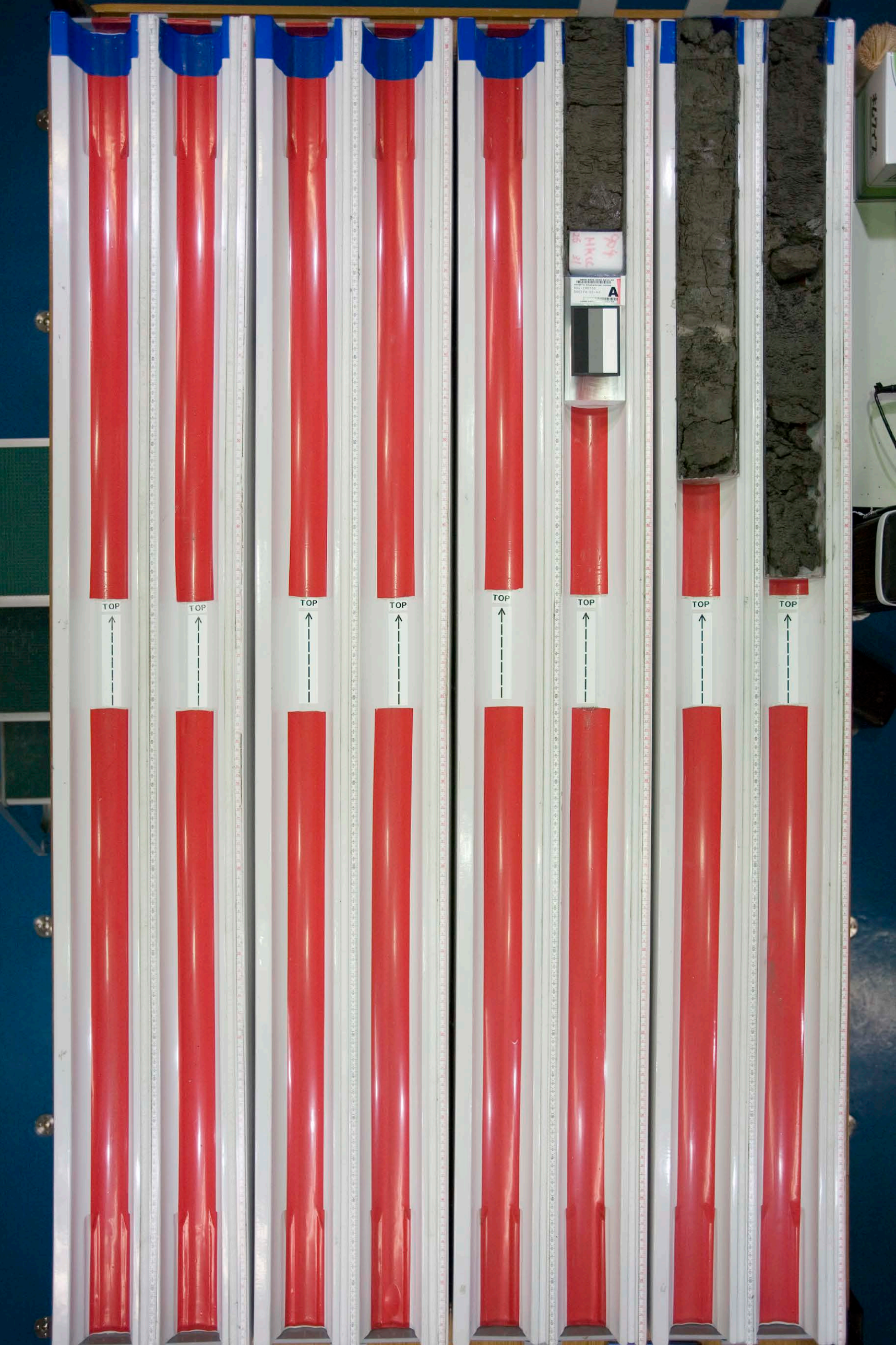
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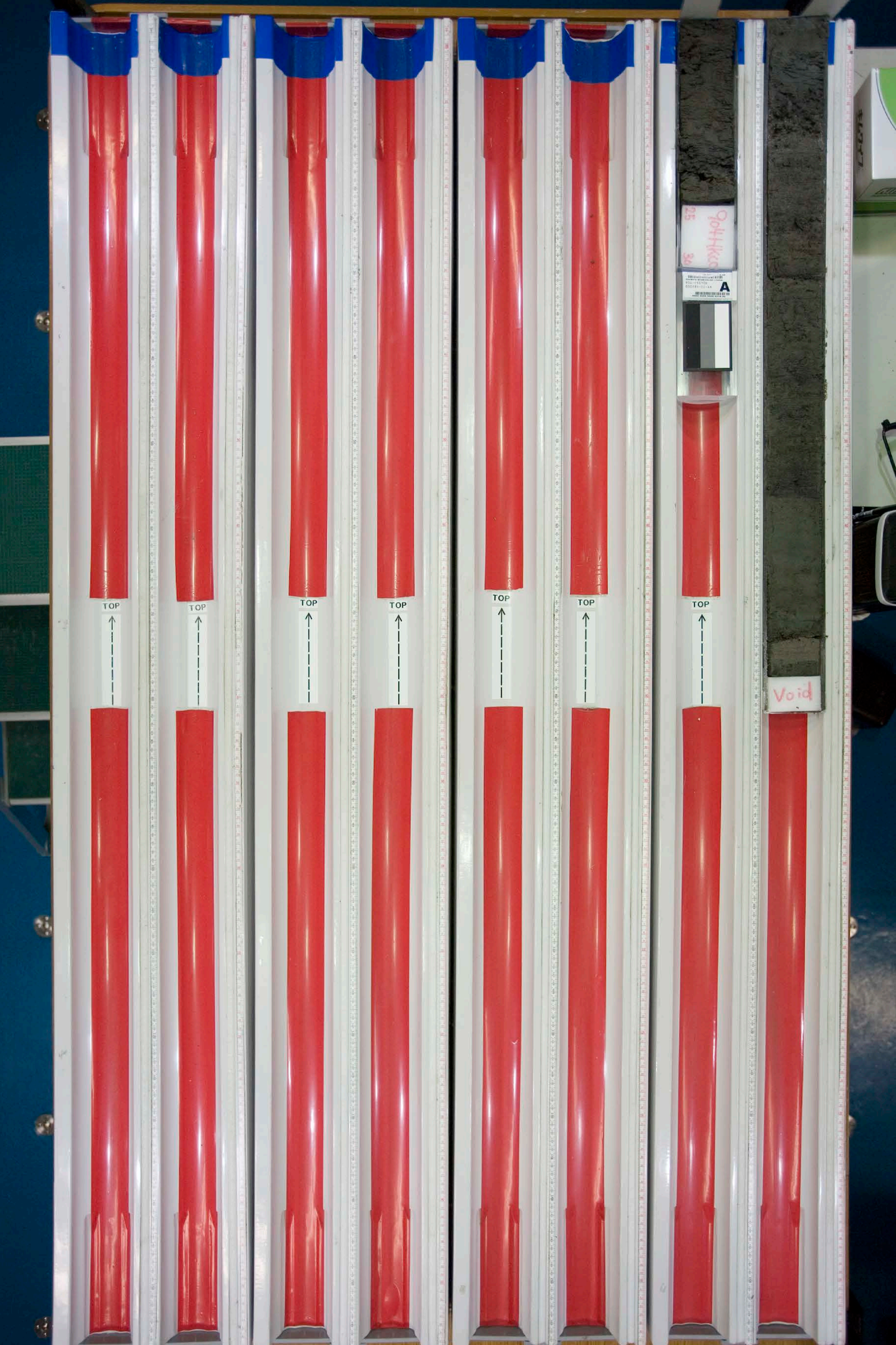
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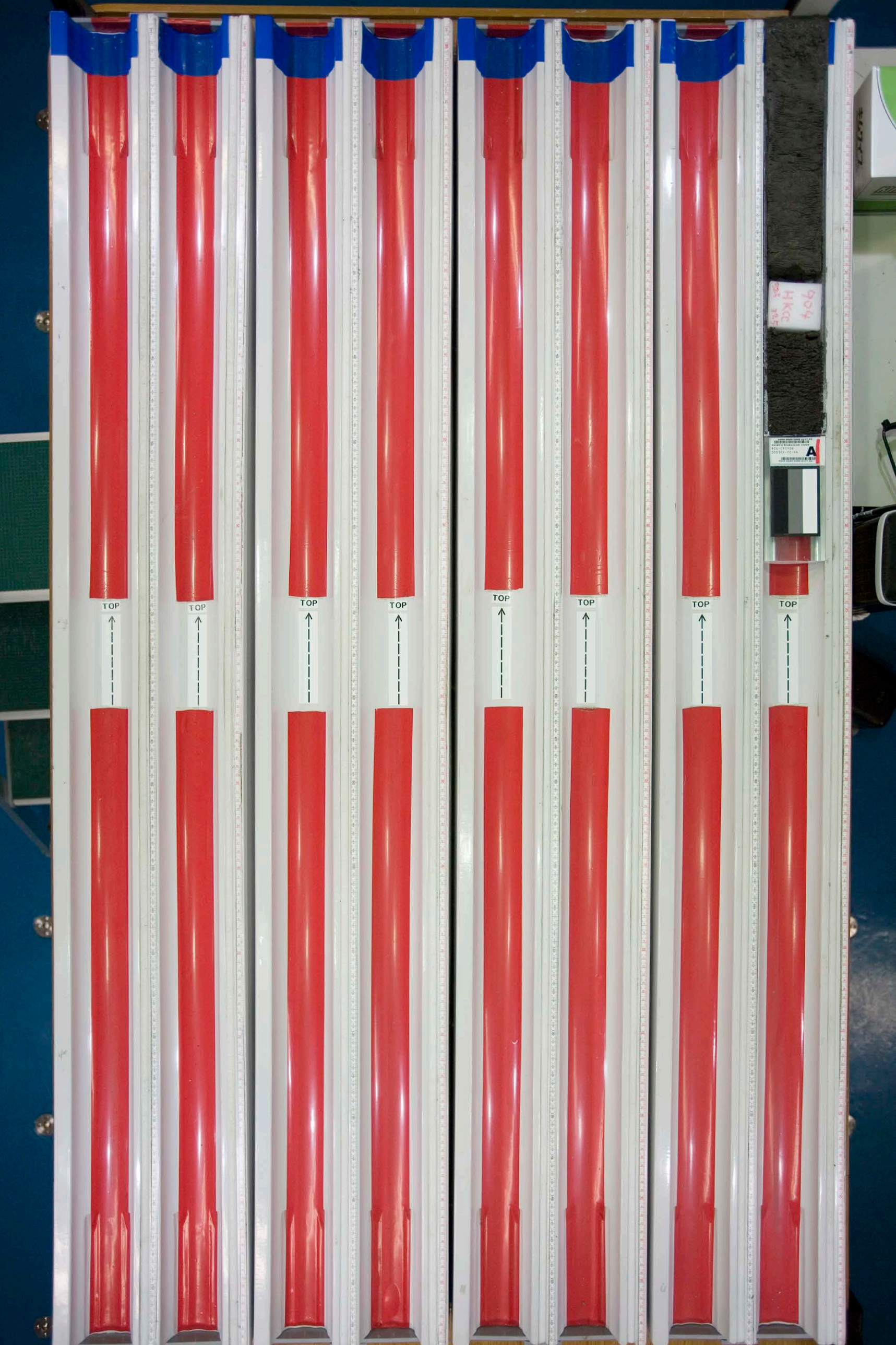
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