

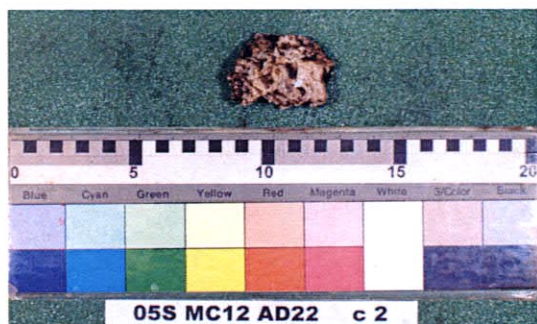
Sampling Point: 05SMC12 AD22

Rock type sample description



Sample No.: c1
Sample Size: 16cm×11cm×7cm
Description:

Calcareous conglomerate which includes granule - pebble size fragments consisting of aphyric basalt. Manganese crust (2cm thick) covers surface of this sample.



Sample No.: c2
Sample Size: 4cm×3cm×2cm
Description:

Clastic limestone which includes bioclasts and intraclasts. (packstone - grainstone). This sample appears to be redeposit of reef limestone.

Sampling Point: 05SMC12 AD23



photograph of whole sample

Date: 2005/5/7
Time: 22:32:25 - 22:44:43
Location:
Longitude: 145°59.886'E - 145°59.954'E
Latitude: 09°18.864'N - 09°18.955'N
Water Depth: 2,111m - 1,992m

Sample Weight: 0.092 kg

Contents:
Manganese crust, limestone (granule - pebble size fragments) and unconsolidated calcareous sand.

Crust type sample description



Description:
Fragments of manganese crust (> 1cm thick) and clastic limestone (substrate rock).

Sampling Point: 05SMC12 AD24



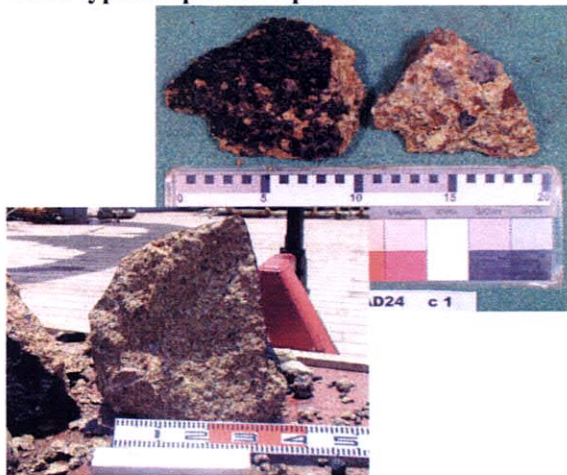
photograph of whole sample

Date: 2005/5/8
Time: 00:36:38 - 01:28:37
Location:
Longitude: 145°59.968'E - 146°00.228'E
Latitude: 09°18.317'N - 09°18.556'N
Water Depth: 2,368m - 2,077m

Sample Weight: 269.7 kg

Contents:
Pyroclastic rock (boulder size debris) and unconsolidated calcareous sand.

Rock type sample description



Sample No.: c1
Sample Size: 75cm×55cm×48cm

Description:
Pyroclastic rock which includes granule - pebble size angular gravels consisting of altered volcanic rock. Thin (<1mm) Mn oxide layer covers surface of this sample.



Sample No.: c2
Sample Size: 17cm×14cm×8cm

Description:
Pyroclastic rock which includes cobble size angular gravel consisting of olivine basalt. Thin (<1mm) Mn oxide layer covers surface of this sample.



Sample No.: c3
Sample Size: 17cm×15cm×10cm

Description:
Pyroclastic rock which includes cobble size angular gravels consisting of olivine basalt. Thin (<1mm) Mn oxide layer covers surface of this sample.

Sampling Point: 05SMC12 AD25



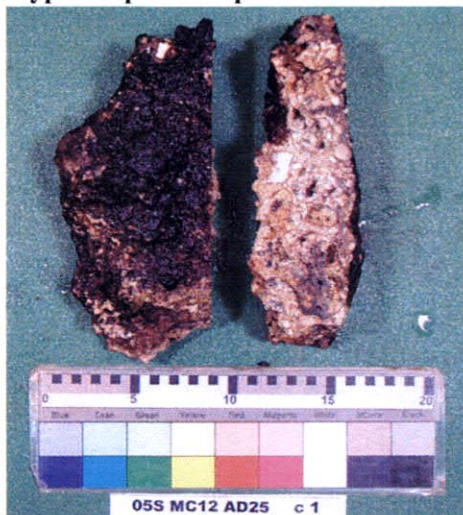
photograph of whole sample

Date: 2005/5/8
Time: 03:45:31 - 04:39:44
Location:
Longitude: 146°04.867'E - 146°05.070'E
Latitude: 09°17.632'N - 09°17.629'N
Water Depth: 2,221m - 2,140m

Sample Weight: 3.14 kg

Contents:
Calcareous conglomerate, pumice (fragments) and unconsolidated calcareous sand.

Rock type sample description



Sample No.: c1
Sample Size: 17cm×14cm×5cm

Description:
Calcareous conglomerate which includes pebble size fragments of reef limestone. Thin (<1mm) Mn oxide layer covers surface of this sample.

Sampling Point: 05SMC12 AD26



photograph of whole sample

Date: 2005/5/8
Time: 06:22:23 - 06:36:18
Location:
Longitude: 146°05.022'E - 146°05.061'E
Latitude: 09°18.852'N - 09°18.829'N
Water Depth: 1,464m - 1,423m

Sample Weight: 2.02 kg

Contents:
Unconsolidated calcareous sand (including fragments of manganese crust and limestone).

Sampling Point: 05SMC12 AD27



photograph of whole sample

Date: 2005/5/8
Time: 22:11:12 - 22:41:21
Location:
Longitude: 146°02.739'E - 146°02.871'E
Latitude: 09°17.583'N - 09°17.712'N
Water Depth: 2,209m - 2,020m

Sample Weight: 65.1 kg

Contents:

Calcareous conglomerate (substrate rock?), tuffaceous sandstone/siltstone (fragments), and unconsolidated calcareous sand.

Rock type sample description



Sample No.: c1
Sample Size: 41cm×27cm×22cm

Description:

Tuffaceous sandstone/siltstone which is well layered and shows grading structure. Thin (<1mm) Mn oxide layer covers surface of this sample.



Sample No.: c2
Sample Size: 15cm×14cm×9.5cm

Description:

Reddish brown tuffaceous siltstone which yields trace fossil. Manganese crust (0.3cm thick) covers surface of this sample.



Sample No.: c3
Sample Size: 17cm×10cm×9cm

Description:

Calcareous conglomerate which includes a cobble size fragment of aphyric basalt. Manganese crust (0.6cm thick) covers surface of this sample. A fragment of basalt is also covered by manganese crust (0.7cm thick).

Sampling Point: 05SMC12 AD27

Rock type sample description



Sample No.: c4
Sample Size: 22cm×17cm×8cm
Description:

Calcareous conglomerate which includes pebble size angular gravels of altered volcanic rock, fine tuff and siltstone. Manganese crust (0.3cm thick) covers surface of this sample. Gravels are also covered by manganese crust (0.4cm maximum thick).



Sample No.: c5
Sample Size: 18cm×11.5cm×6cm
Description:

Tuffaceous sandstone which is irregularly layered by bioturbation. Thin (<1mm) Mn oxide layer covers surface of this sample.

Sampling Point: 05SMC12 AD28



photograph of whole sample

Date: 2005/5/9
Time: 00:39:49 - 01:51:22
Location:
Longitude: 146°04.907'E - 146°05.025'E
Latitude: 09°21.160'N - 09°21.119'N
Water Depth: 1,858m - 1,867m

Sample Weight: 4.66 kg

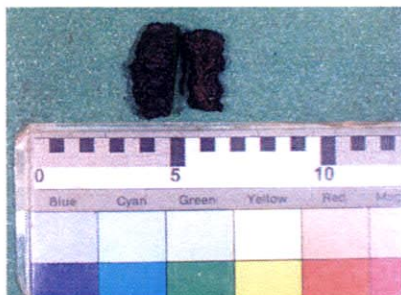
Contents:
Manganese crust and calcareous conglomerate (substrate rock), fine sandstone, basalt, pumice, limestone (fragments), and unconsolidated calcareous sand.

Crust type sample description



Sample No.: a1
Sample Size: 4.5cm×3cm×2.5cm

Description:
Manganese crust (1cm thick). This sample shows columnar texture. Substrate rock is calcareous conglomerate.



Sample No.: a2
Sample Size: 3cm×2.5cm×1.5cm

Description:
Manganese crust (> 1cm thick). This sample shows porous texture.

Rock type sample description



Sample No.: c1
Sample Size: 14cm×8cm×4.5cm

Description:
Dark yellowish brown calcareous sandstone.



Sample No.: c2
Sample Size: 5cm×5cm×4.5cm

Description:
Fragment of altered basalt (or tuffaceous siltstone).

Sampling Point: 05SMC12 AD29



photograph of whole sample

Date: 2005/5/9
Time: 03:43:09 - 04:28:07
Location:
Longitude: 146°05.604'E - 146°05.912'E
Latitude: 09°22.788'N - 09°22.755'N
Water Depth: 2,385m - 2,306m

Sample Weight: 118.0 kg

Contents:

Manganese crust, calcareous conglomerate and sandstone (substrate rock), tuffaceous sandstone, aphyric basalt and reef limestone (fragments), and unconsolidated calcareous sand.

Crust type sample description



Sample No.: a1
Sample Size: 46cm×36cm×17cm

Description:

Manganese crust (5cm thick) and calcareous conglomerate (substrate rock). Manganese nodules are distributed on the base of crust layer.



Sample No.: a2
Sample Size: 40cm×41cm×5cm

Description:

Manganese crust (3.5cm thick) and calcareous sandstone (substrate rock).



Sample No.: a3
Sample Size: 56cm×26cm×19cm

Description:

Manganese crust (> 14cm thick) which has three-layered structure.

Sampling Point: 05SMC12 AD29

Crust type sample description



Sample No.: a4
Sample Size: 22cm×14cm×9cm
Description:
Manganese crust (> 10cm thick) which has two-layered structure.

Rock type sample description



Sample No.: c1
Sample Size: 14cm×13cm×10cm
Description:
Light yellowish gray tuffaceous sandstone. Thin (<1mm) Mn oxide layer covers surface of this sample.



c2

c3



c4

Sample No.: c2 - c4
Sample Size: pebble - cobble size
Description:
Pebble - cobble size subangular gravels which consist of limestone (rudstone, packstone and grainstone). They are mainly composed of various bioclasts.



Sample No.: c6
Sample Size: 29cm×18cm×13cm
Description:
Boulders size fragment of dark yellowish gray aphyric basalt. Manganese crust (0.5cm thick) covers surface of this sample.

Sampling Point: 05SMC12 AD30



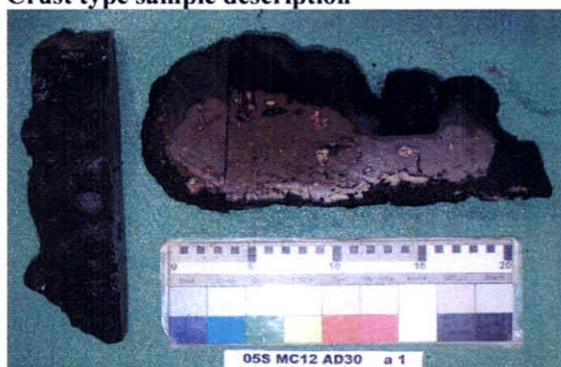
photograph of whole sample

Date: 2005/5/9
Time: 07:29:17 - 08:26:10
Location:
Longitude: 145°54.696'E - 145°55.256'E
Latitude: 09°22.903'N - 09°22.889'N
Water Depth: 2,370m - 2,312m

Sample Weight: 35.5 kg

Contents:
Manganese crust and nodule, siltstone (substrate rock).

Crust type sample description



Sample No.: a1
Sample Size: 33cm×34cm×10cm

Description:
Manganese crust (3cm thick) and brown siltstone (substrate rock). This crust has two-layered structure.



Sample No.: a2
Sample Size: 40cm×29cm×7cm

Description:
Slab of manganese crust (1cm thick) and brown siltstone (substrate rock). This crust has two-layered structure.



Sample No.: b1
Sample Size: 6cm×5cm×5cm

Description:
Manganese nodule, 1.2cm thick of Mn oxide and nuclear of this nodule is brown siltstone.

Sampling Point: 05SMC13 AD15



photograph of whole sample

Date: 2005/5/9
Time: 22:26:24 - 23:08:47
Location:
Longitude: 145°00.158'E - 145°00.439'E
Latitude: 10°26.214'N - 10°26.195'N
Water Depth: 1,724m - 1,719m

Sample Weight: 91.2 kg

Contents:

Manganese crust and nodule, siltstone (substrate rock and fragments), agate? (fragments), and unconsolidated calcareous sand.

Crust type sample description



Sample No.: a1
Sample Size: 28cm×22cm×15cm

Description:

Manganese crust (1cm thick) and brown siltstone (substrate rock).

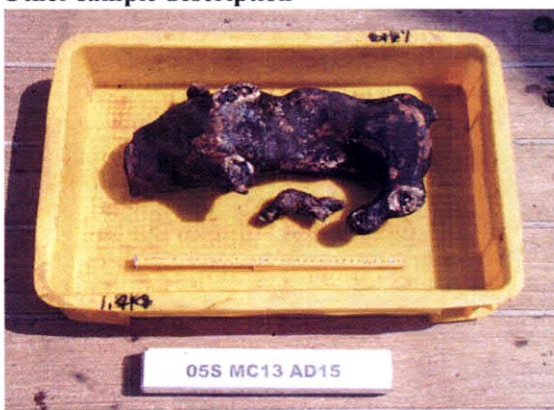


Sample No.: b1
Sample Size: 5cm×4.5cm×3.5cm

Description:

Manganese nodule 1.2cm thick of Mn oxide and nuclear of this nodule is calcareous conglomerate.

Other sample description



Sample Size: 40cm×12cm×10cm

Description:

Agate-like branched fragment. Cross section of this sample shows layered structure.

Sampling Point: 05SMC13 AD16



photograph of whole sample

Date: 2005/5/10
Time: 00:43:04 - 01:16:59
Location:
Longitude: 145°00.834'E - 145°01.085'E
Latitude: 10°26.504'N - 10°26.355'N
Water Depth: 2,061m - 1,948m

Sample Weight: 7.70 kg

Contents:

Fragments of basalt, tuff, pumice, and unconsolidated calcareous sand.

Rock type sample description



Sample No.: c1
Sample Size: 22cm×15cm×13cm

Description:

Cobble size subangular gravel of cpx-bearing basalt. Thin (<2mm) Mn oxide layer covers surface of this sample.