

IODP Expedition 389 VCD

Site: M0102A

Hole M0102A

Region: Kohala
Water Depth: 412.8 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
0.0			1R-1	XCT not scanned				Coralline algae;Mollusc;Coral-undetermined;Foraminifera	encrustation - multilayered;bioerosion	10YR 6/2	Unconsolidated sediment rich in bioclasts (mollusc, coral and CCA fragments, larger benthic foraminifera) and cm-size rhodoliths..
0.5			2R-1					Coralline algae;Mollusc;Coral-undetermined;Foraminifera	encrustation - multilayered;bioerosion	N6	Unconsolidated sediment rich in bioclasts and cm-size rhodoliths. Coral fragments and large benthic foraminifera. Black volcanic grains.
1.0											
1.5											
2.0			3R-1					Coralline algae;Mollusc;Coral-undetermined;Foraminifera; Agariciidae-undetermined;Vermetidae;BRYO	encrustation - multilayered;bioerosion	N6	Unconsolidated sediment rich in bioclasts and cm-size rhodoliths. Coral fragments (Agaricidae) and large benthic foraminifera. Black volcanic grains. Grainstone fragment. Vermetid and bryozoan encrustation.
2.5											
3.0			4R-1					Coralline algae;Mollusc;Foraminifera;BRYO;Homotrema;C	encrustation - multilayered;bioerosion	N6	Unconsolidated sediment rich in bioclasts and cm-size rhodoliths. Branching coral fragments, molluscs, and large benthic foraminifera.

VCD legend

Core recovery

- █ Core recovered
- No recovery
- ▨ Wash bore
- ▢ High disturbance

Facies

- | | | |
|-------------------------|------------------------|------------------|
| █ FRW-CorAlgBound | █ FRW-AlgBound | █ Mixed-carb/vol |
| █ FRW-CorAlgMicrobBound | █ RDST/FLST-Rhodoliths | ▢ VOL-Clast |
| █ FRW-MicrobAlgBound | █ DET-Consolidated | ▢ VOL-Basalt |
| █ FRW-MicrobBound | █ DET-Unconsolidated | ▢ FALL |

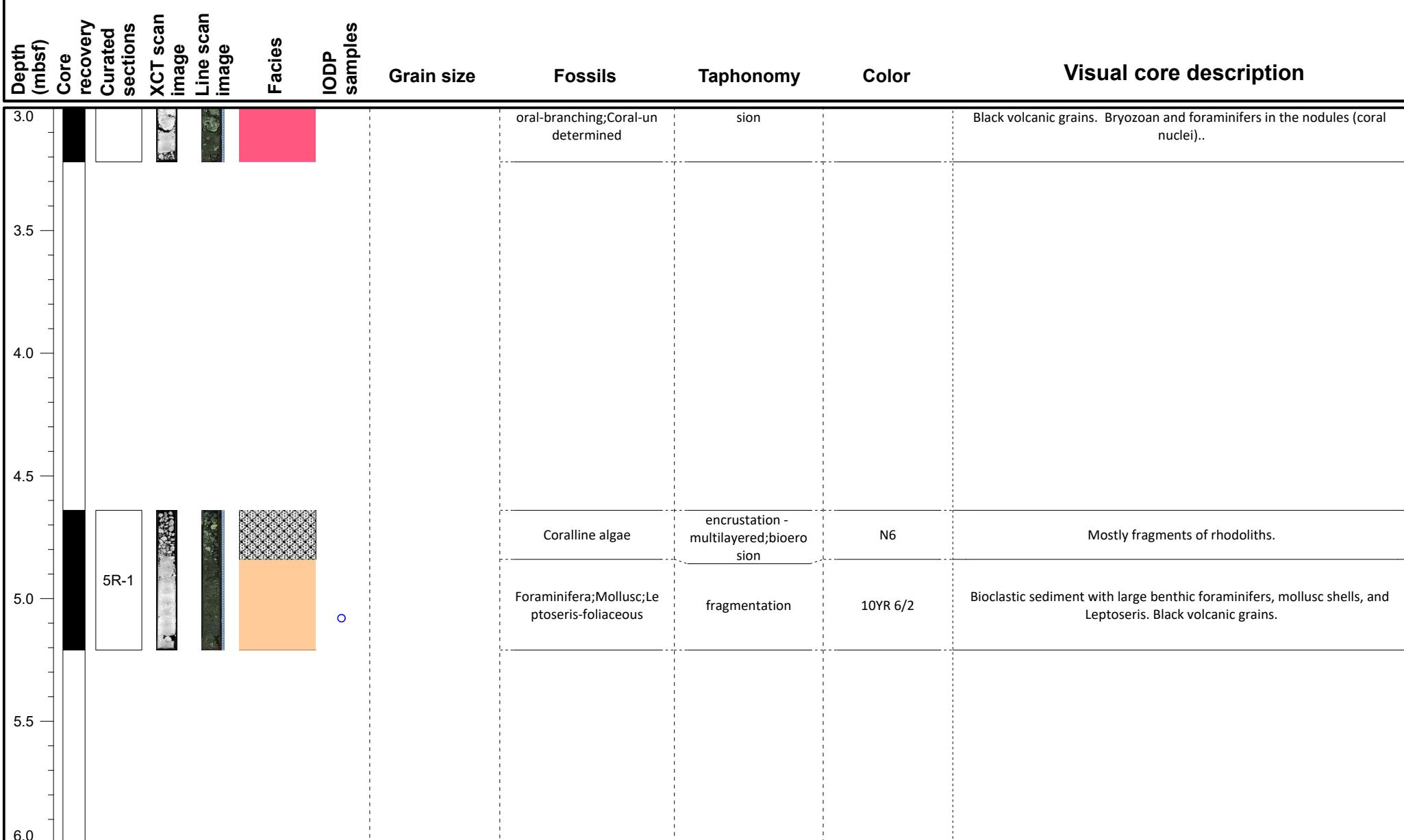
IODP Samples

- | | |
|-----------|----------|
| ◀ Dating | ✚ MAD/PW |
| □ GEOCHEM | ◆ PMAG |
| ○ IWRH | |

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- FRW-CorAlgMicrobBound
- FRW-MicrobAlgBound
- FRW-MicrobBound
- FRW-AlgBound
- RDST/FLST-Rhodoliths
- DET-Consolidated
- DET-Unconsolidated

Facies

- Mixed-carb/vol
- VOL-Clast
- VOL-Basalt
- FALL

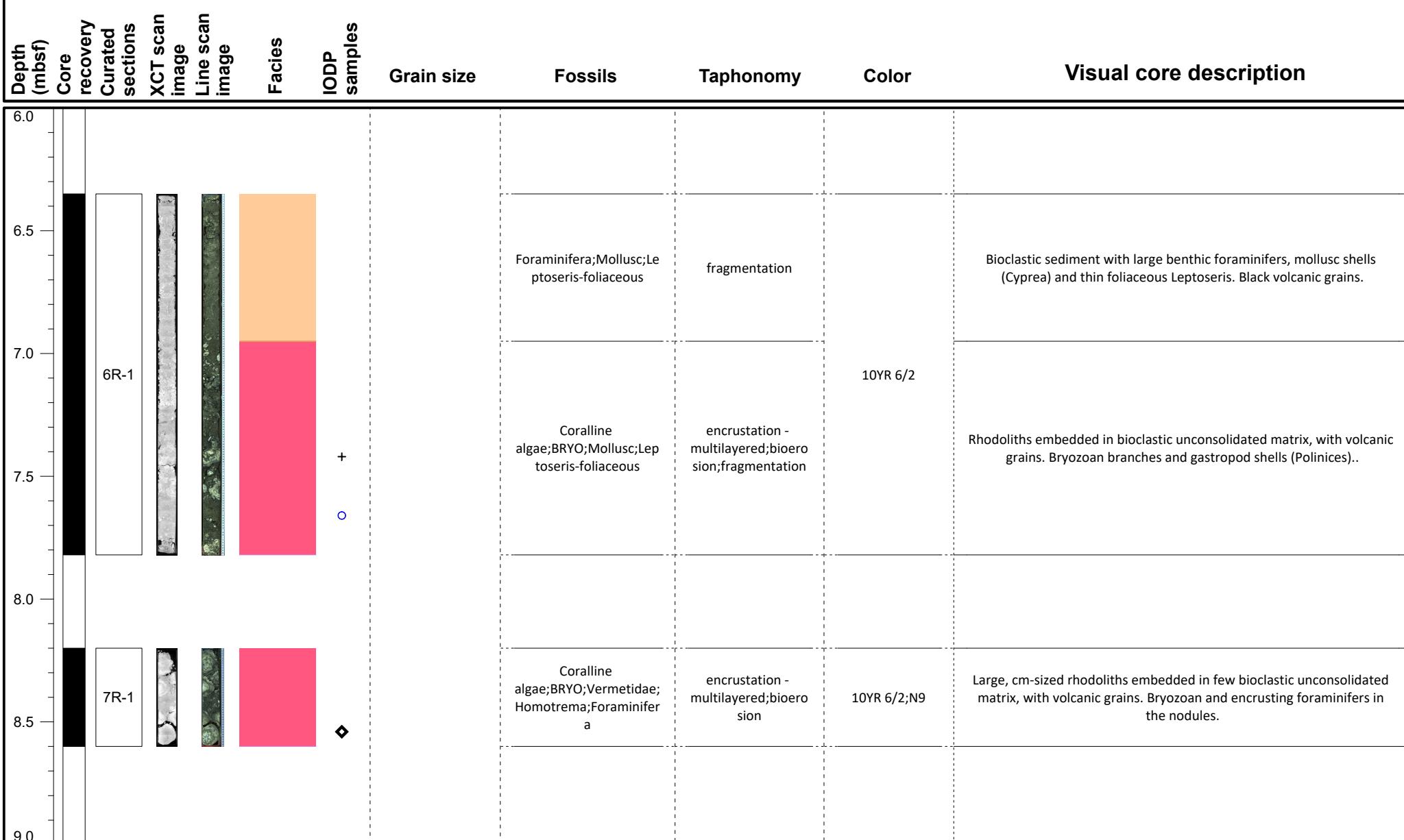
IODP Samples

- Dating
- GEOCHEM
- IWRH
- MAD/PW
- PMAG

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Hole M0102A

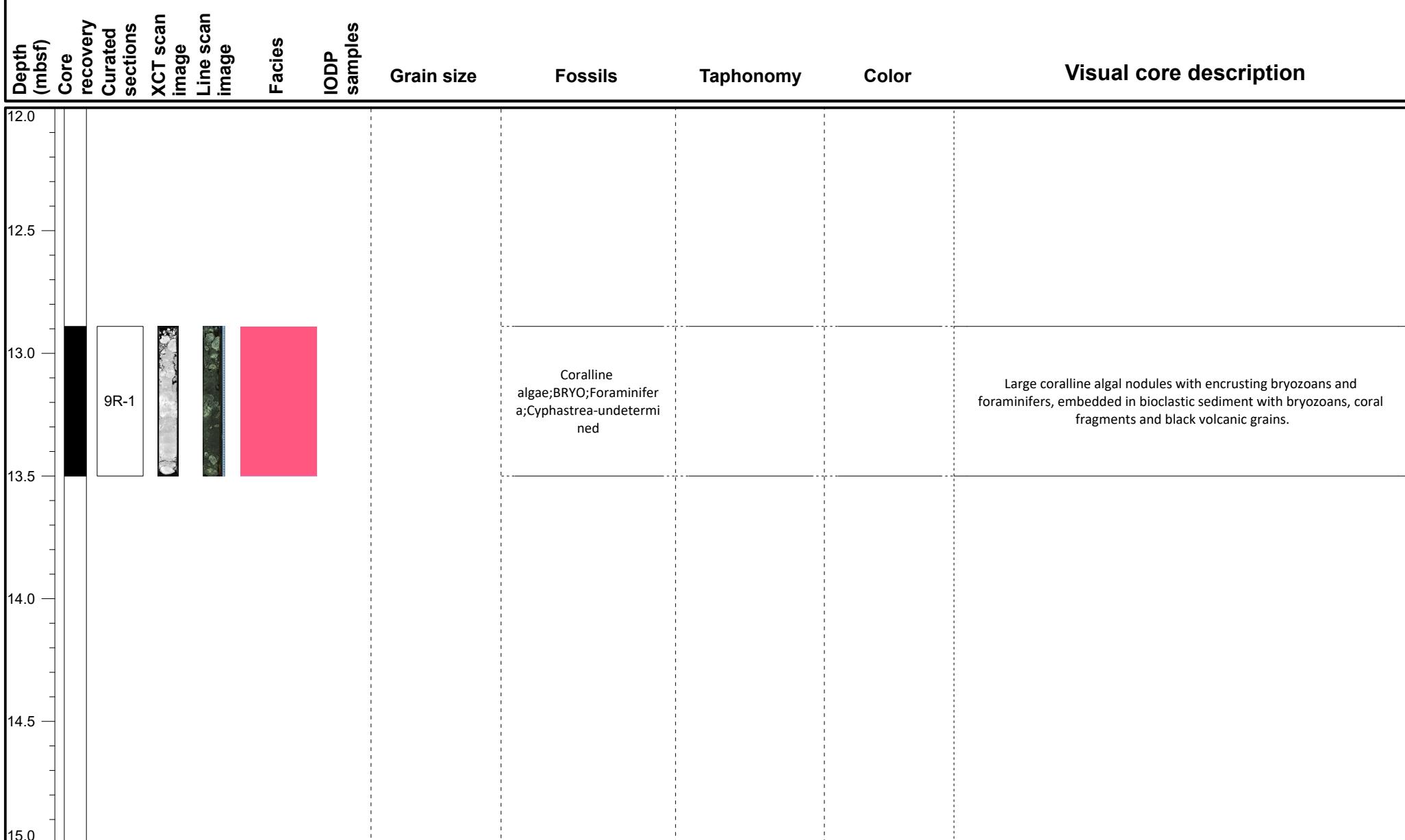
Region: Kohala
Water Depth: 412.8 m

VCD legend	Core recovery	Facies	IODP Samples		
<ul style="list-style-type: none"> ■ Core recovered □ No recovery ▨ Wash bore ▨ High disturbance 	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;"> ■ FRW-CorAlgBound ■ FRW-CorAlgMicrobBound ■ FRW-MicrobAlgBound ■ FRW-MicrobBound </td><td style="width: 33%; text-align: center;"> ■ FRW-AlgBound ■ RDST/FLST-Rhodoliths ■ DET-Consolidated ■ DET-Unconsolidated </td><td style="width: 33%; text-align: center;"> ■ Mixed-carb/vol ■ VOL-Clast ■ VOL-Basalt ■ FALL </td></tr> </table>	■ FRW-CorAlgBound ■ FRW-CorAlgMicrobBound ■ FRW-MicrobAlgBound ■ FRW-MicrobBound	■ FRW-AlgBound ■ RDST/FLST-Rhodoliths ■ DET-Consolidated ■ DET-Unconsolidated	■ Mixed-carb/vol ■ VOL-Clast ■ VOL-Basalt ■ FALL	<ul style="list-style-type: none"> ◀ Dating □ GEOCHEM ○ IWRH + MAD/PW ◆ PMAG
■ FRW-CorAlgBound ■ FRW-CorAlgMicrobBound ■ FRW-MicrobAlgBound ■ FRW-MicrobBound	■ FRW-AlgBound ■ RDST/FLST-Rhodoliths ■ DET-Consolidated ■ DET-Unconsolidated	■ Mixed-carb/vol ■ VOL-Clast ■ VOL-Basalt ■ FALL			

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- FRW-MicrobAlgBound
- FRW-MicrobBound

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- Mixed-carb/vol
- VOL-Clast
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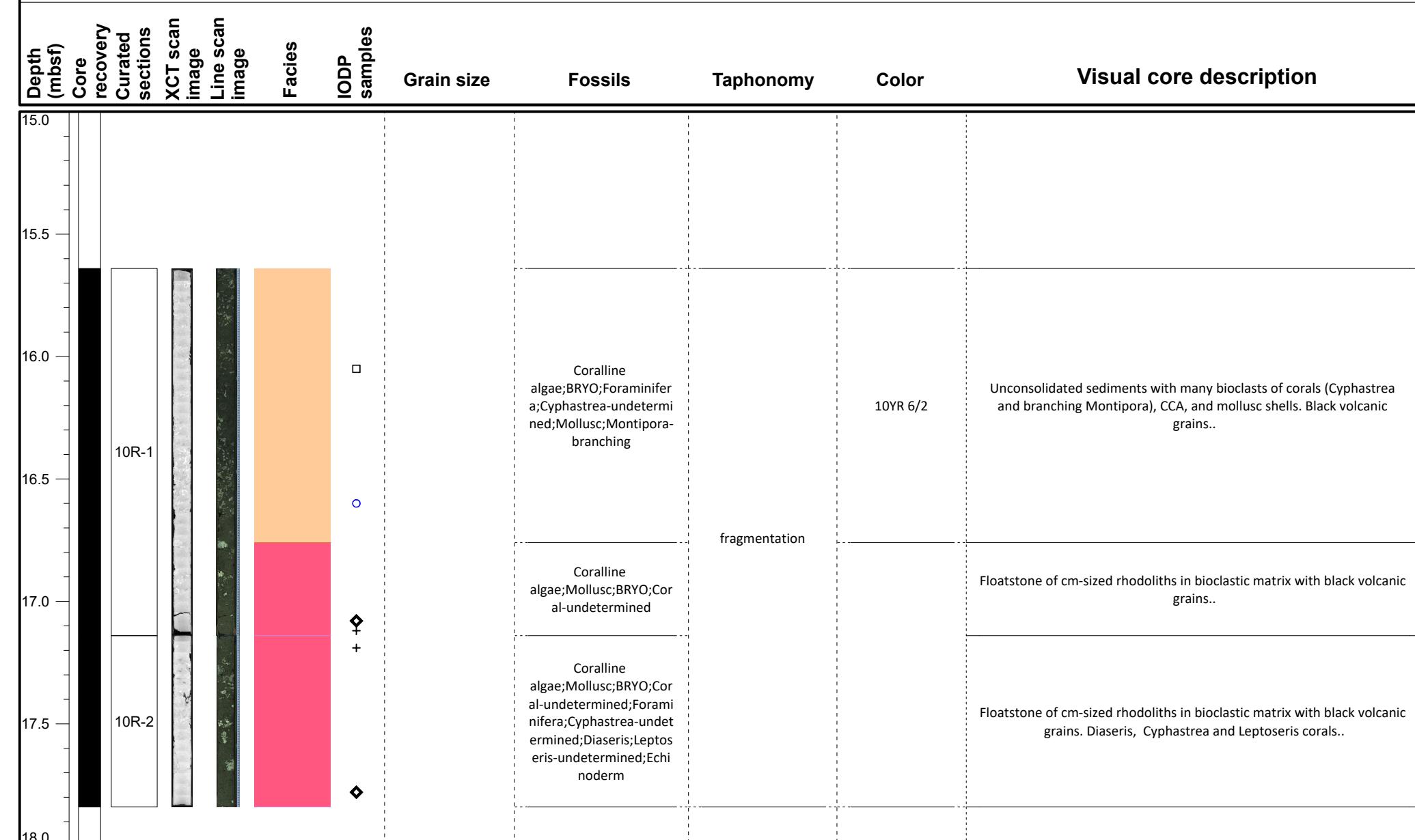
IODP Samples

- Dating
- GEOCHEM
- IWRH
- MAD/PW
- PMAG

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- FRW-MicrobBound

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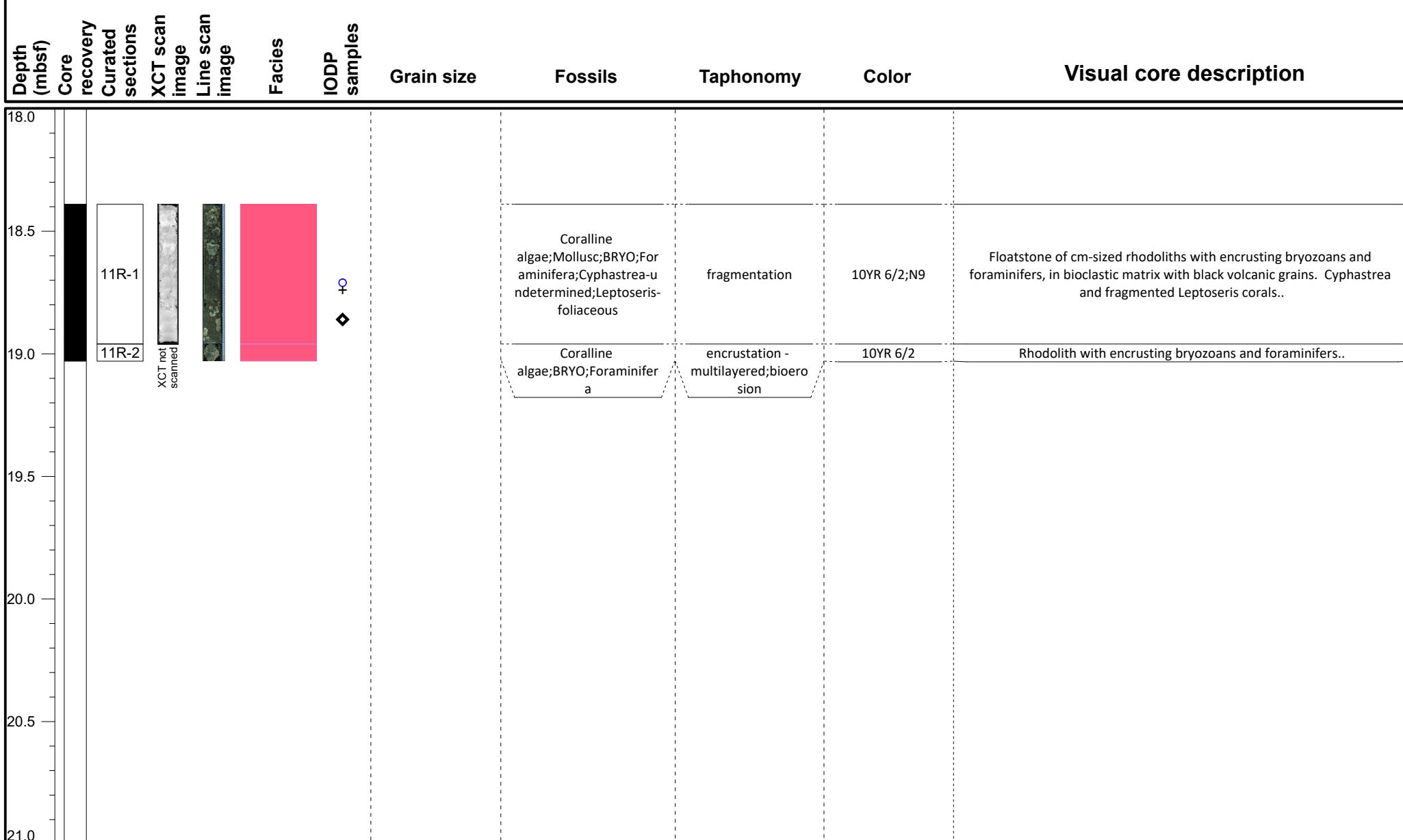
IODP Samples

- ◀ Dating
- + MAD/PW
- GEOCHEM
- ◆ PMAG
- IWRH

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Facies

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- █ DET-Consolidated
- █ DET-Unconsolidated

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- █ VOL-Clast
- █ VOL-Basalt
- █ FALL

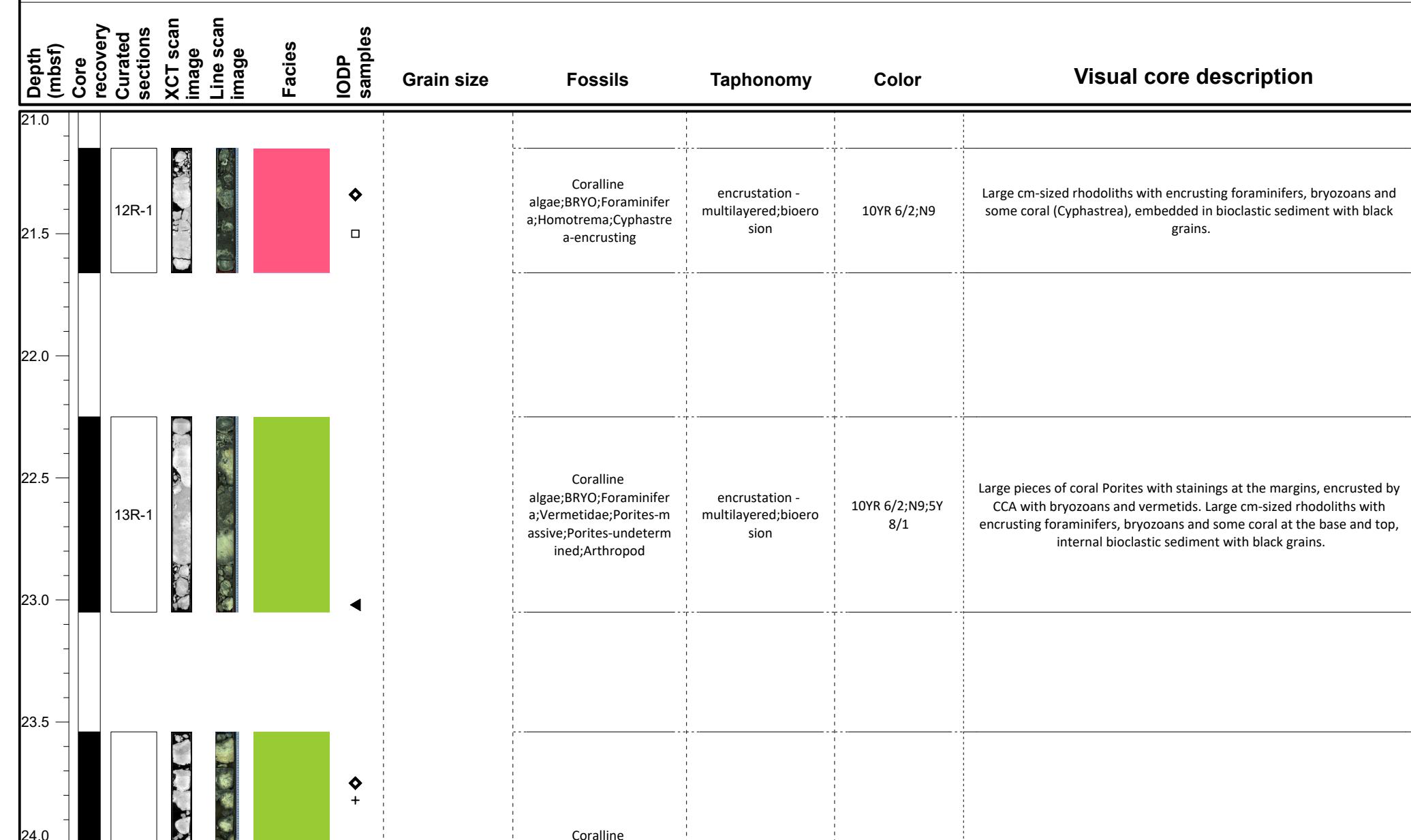
IODP Samples

- ◀ Dating
- +
- MAD/PW
- GEOCHEM
- ◆ PMAG
- IWRH

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- █ FRW-MicrobAlgBound
- █ FRW-MicrobBound

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- █ VOL-Clast
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IODP Samples

- ◀ Dating
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- IWRH
- ◆ PMAG

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24.0			14R-1					algae;Foraminifera;Vermetidae;Porites-massive ;Agariciidae-encrusting; Montipora-encrusting	encrustation - multilayered;bioerosion	10YR 6/2;N9;SY 8/1		Large pieces of coral Porites with stainings at the margins, heavily bored, encrusted by CCA with vermetids. Internal bioclastic sediment with black grains.
24.5												
25.0												
25.5												
26.0												

VCD legend

Core recovery

- █ Core recovered
- No recovery
- ▨ Wash bore
- ▢ High disturbance

- █ FRW-CorAlgBound
- █ FRW-CorAlgMicropBound
- █ FRW-MicropAlgBound
- █ FRW-MicropBound

Facies

- █ FRW-AlgBound
- █ RDST/FLST-Rhodoliths
- █ DET-Consolidated
- █ DET-Unconsolidated

- █ Mixed-carb/vol
- █ VOL-Clast
- █ VOL-Basalt
- █ FALL

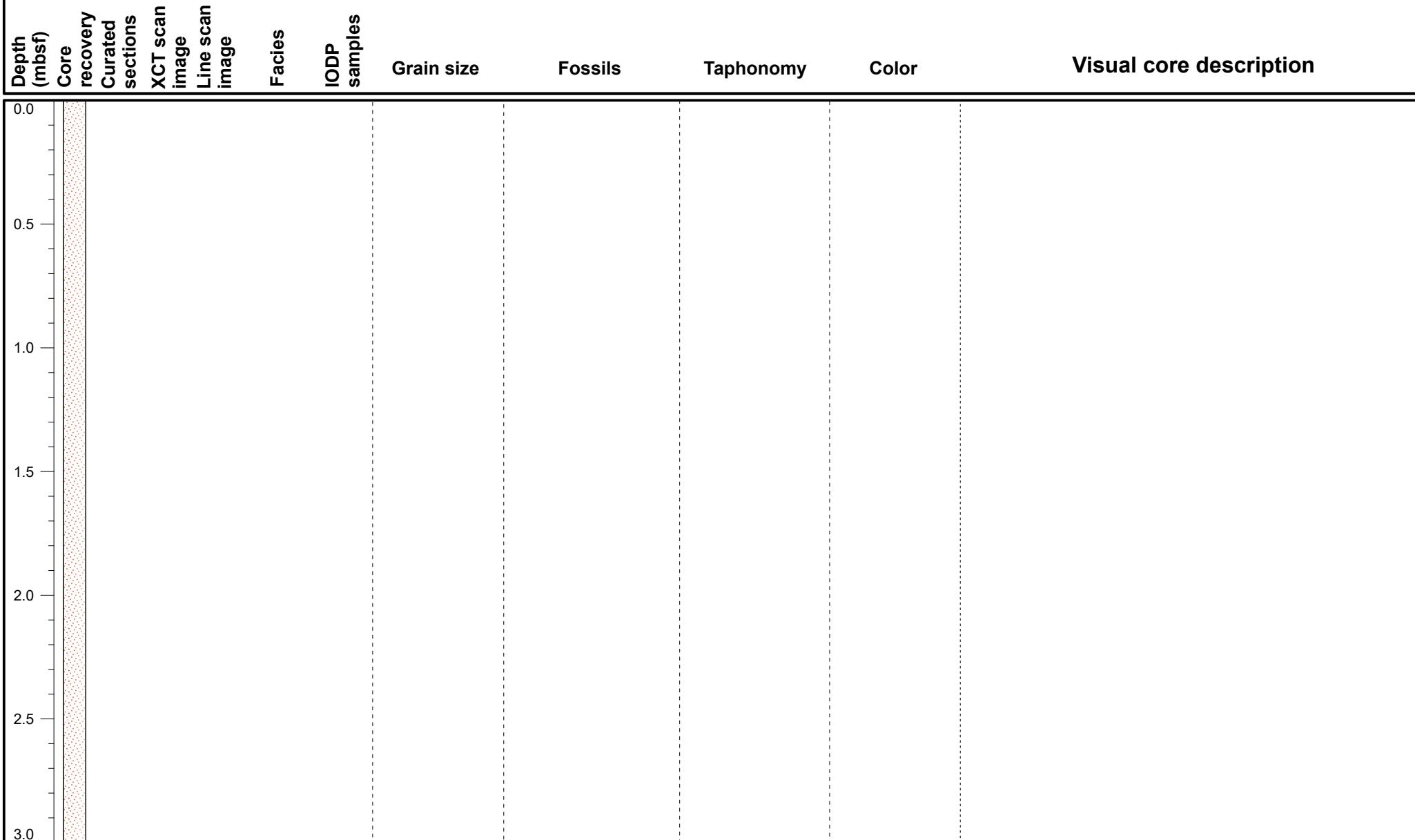
IODP Samples

- ◀ Dating
- ✚ MAD/PW
- ◻ GEOCHEM
- ◆ PMAG
- IWRH

IODP Expedition 389 VCD

Site: M0102B

Hole M0102B

Region: Kohala
Water Depth: 415.4 m

VCD legend

Core recovery

- Core recovered
- No recovery
- Wash bore
- High disturbance

- FRW-CorAlgBound
- FRW-CorAlgMicrobBound
- FRW-MicrobAlgBound
- FRW-MicrobBound

Facies

- FRW-AlgBound
- RDST/FLST-Rhodoliths
- DET-Consolidated
- DET-Unconsolidated

- Mixed-carb/vol
- VOL-Clast
- VOL-Basalt
- FALL

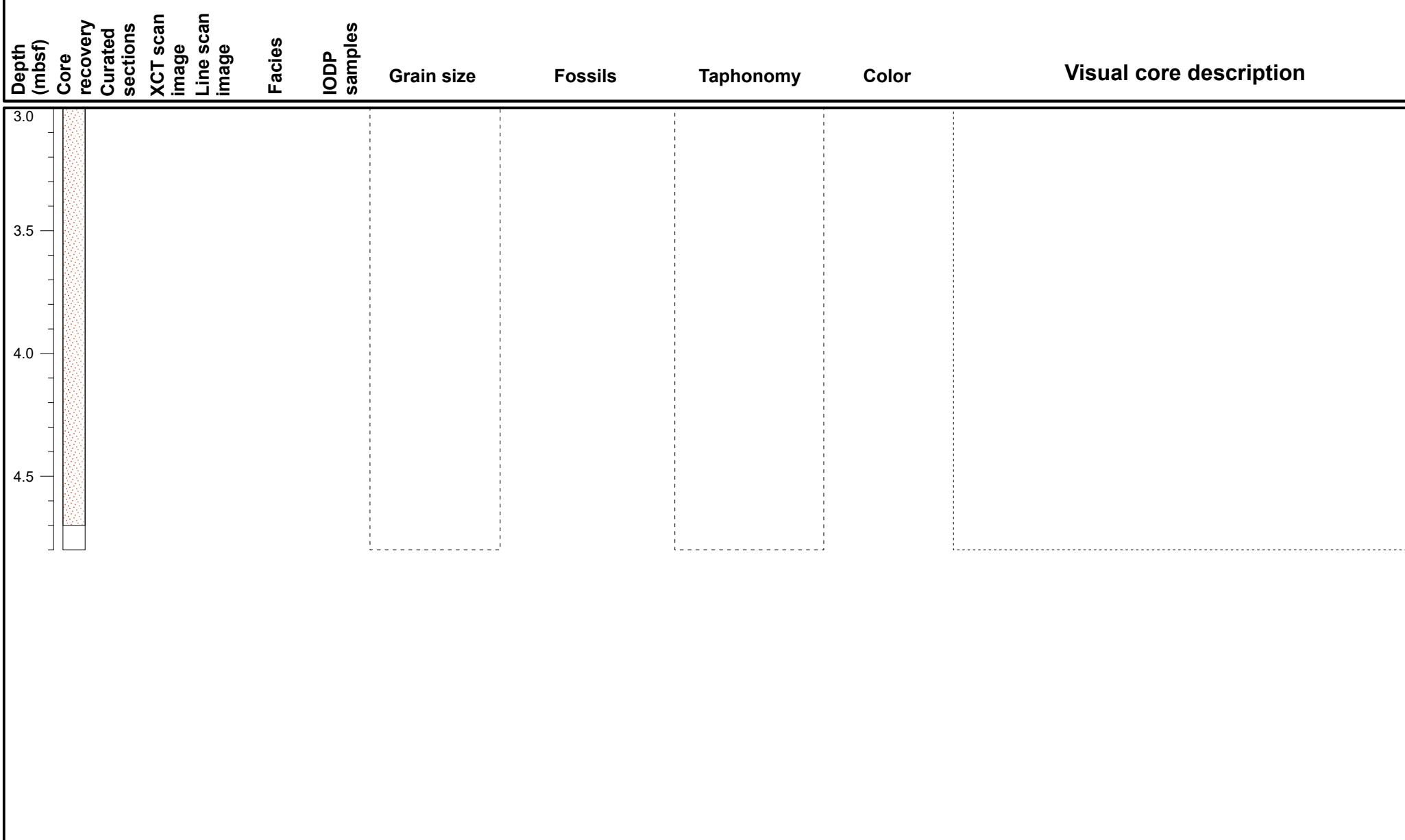
IODP Samples

- ◀ Dating
- GEOCHEM
- IWRH
- + MAD/PW
- ◆ PMAG

IODP Expedition 389 VCD

Site: M0102B

Hole M0102B

Region: Kohala
Water Depth: 415.4 m

VCD legend

Core recovery

- Core recovered
- No recovery
- Wash bore
- ◆ High disturbance

- FRW-CorAlgBound
- FRW-CorAlgMicrobBound
- FRW-MicrobAlgBound
- FRW-MicrobBound

Facies

- FRW-AlgBound
- RDST/FLST-Rhodoliths
- DET-Consolidated
- DET-Unconsolidated

- Mixed-carb/vol
- VOL-Clast
- VOL-Basalt
- FALL

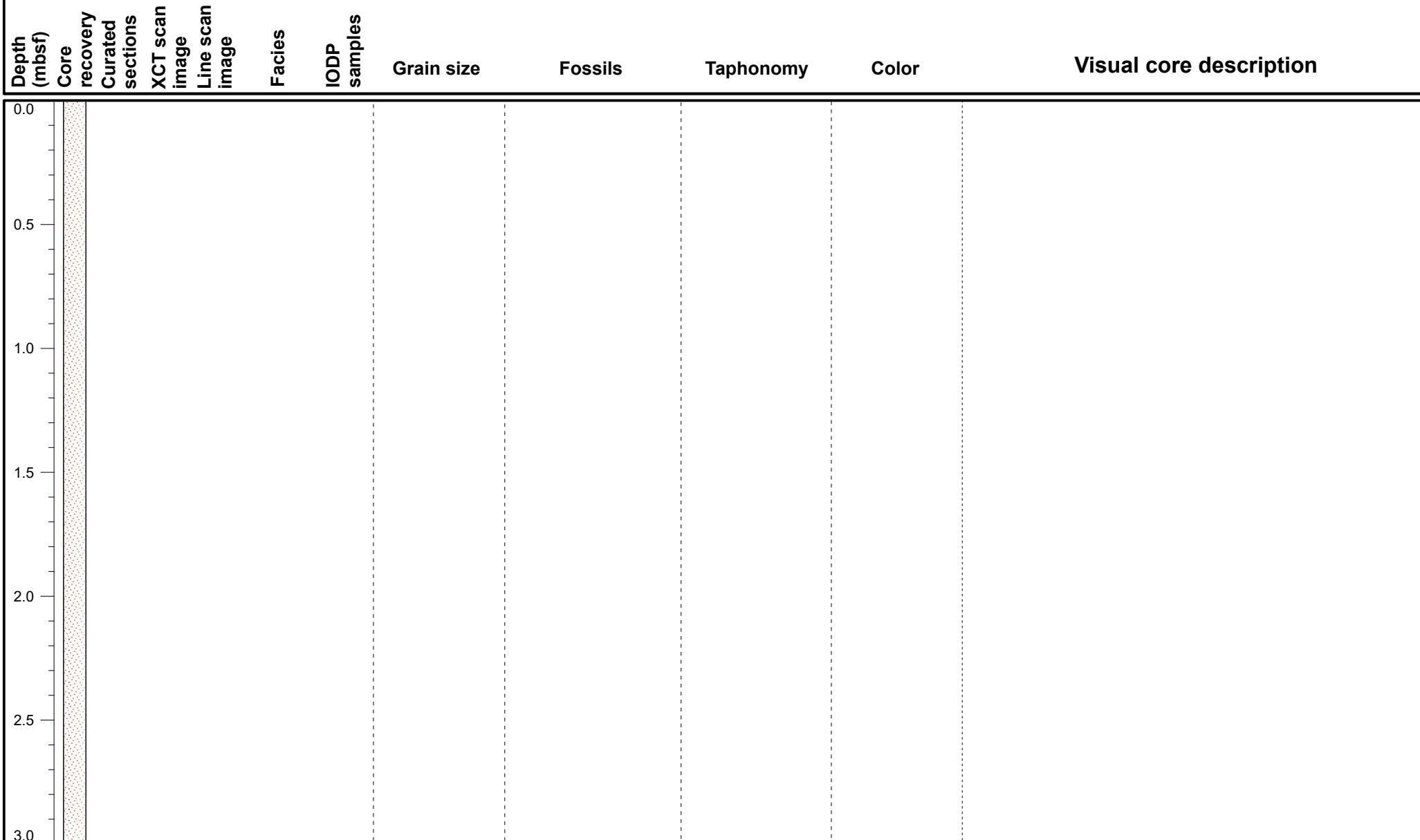
IODP Samples

- ◀ Dating
- + MAD/PW
- GEOCHEM
- ◆ PMAG
- IWRH

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

VCD legend

Core recovery

- █ Core recovered
- █ No recovery
- █ Wash bore
- █ High disturbance

- █ FRW-CorAlgBound
- █ FRW-CorAlgMicrobBound
- █ FRW-MicrobAlgBound
- █ FRW-MicrobBound

Facies

- █ FRW-AlgBound
- █ RDST/FLST-Rhodoliths
- █ DET-Consolidated
- █ DET-Unconsolidated

- █ Mixed-carb/vol
- █ VOL-Clast
- █ VOL-Basalt
- █ FALL

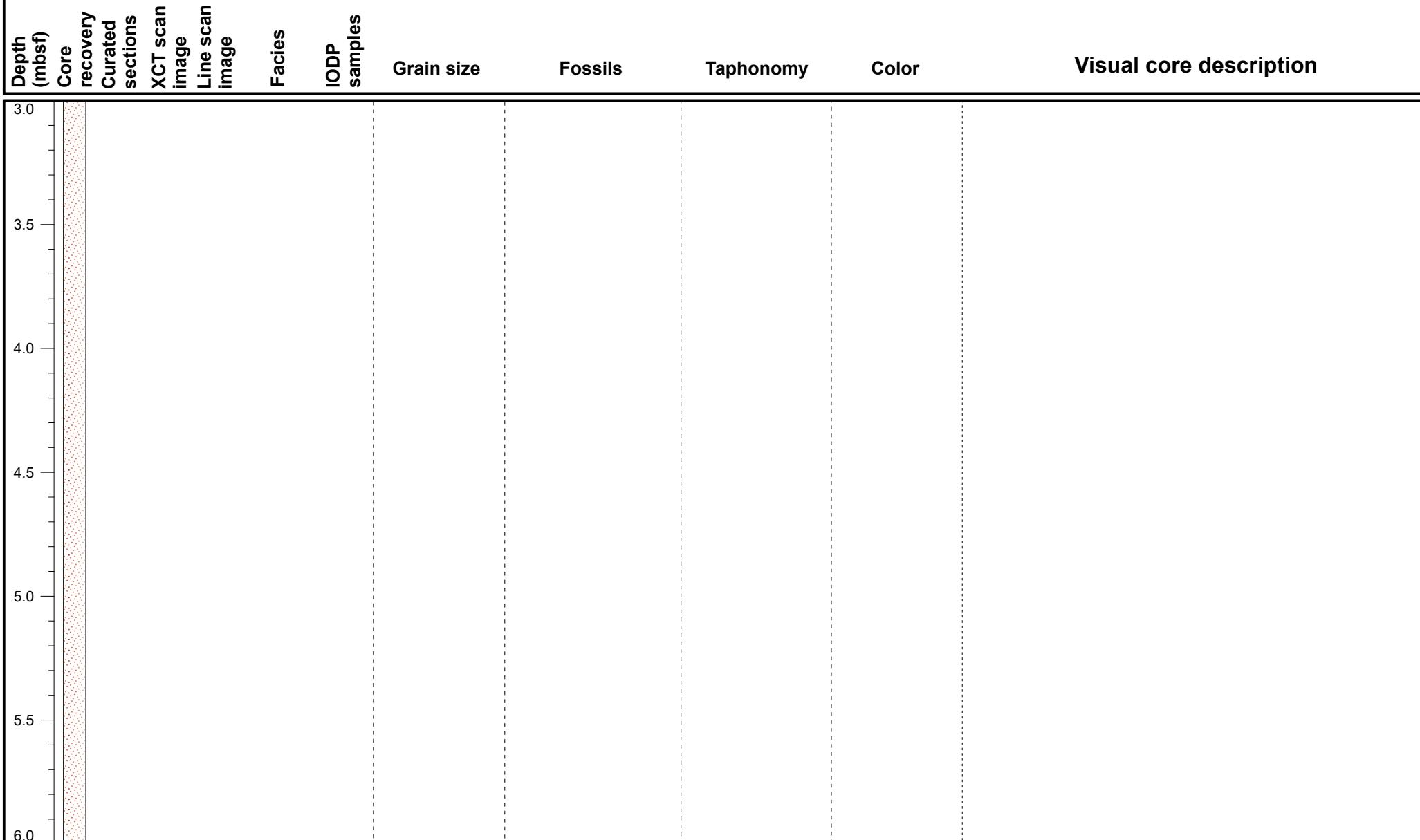
IODP Samples

- ◀ Dating
- █ GEOCHEM
- IWRH
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- ◆ PMAG

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Site: M0102C

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VCD legend

Core recovery

- Core recovered
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- Wash bore
- High disturbance

- FRW-CorAlgBound
- FRW-CorAlgMicrobBound
- FRW-MicrobAlgBound
- FRW-MicrobBound

Facies

- FRW-AlgBound
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- DET-Consolidated
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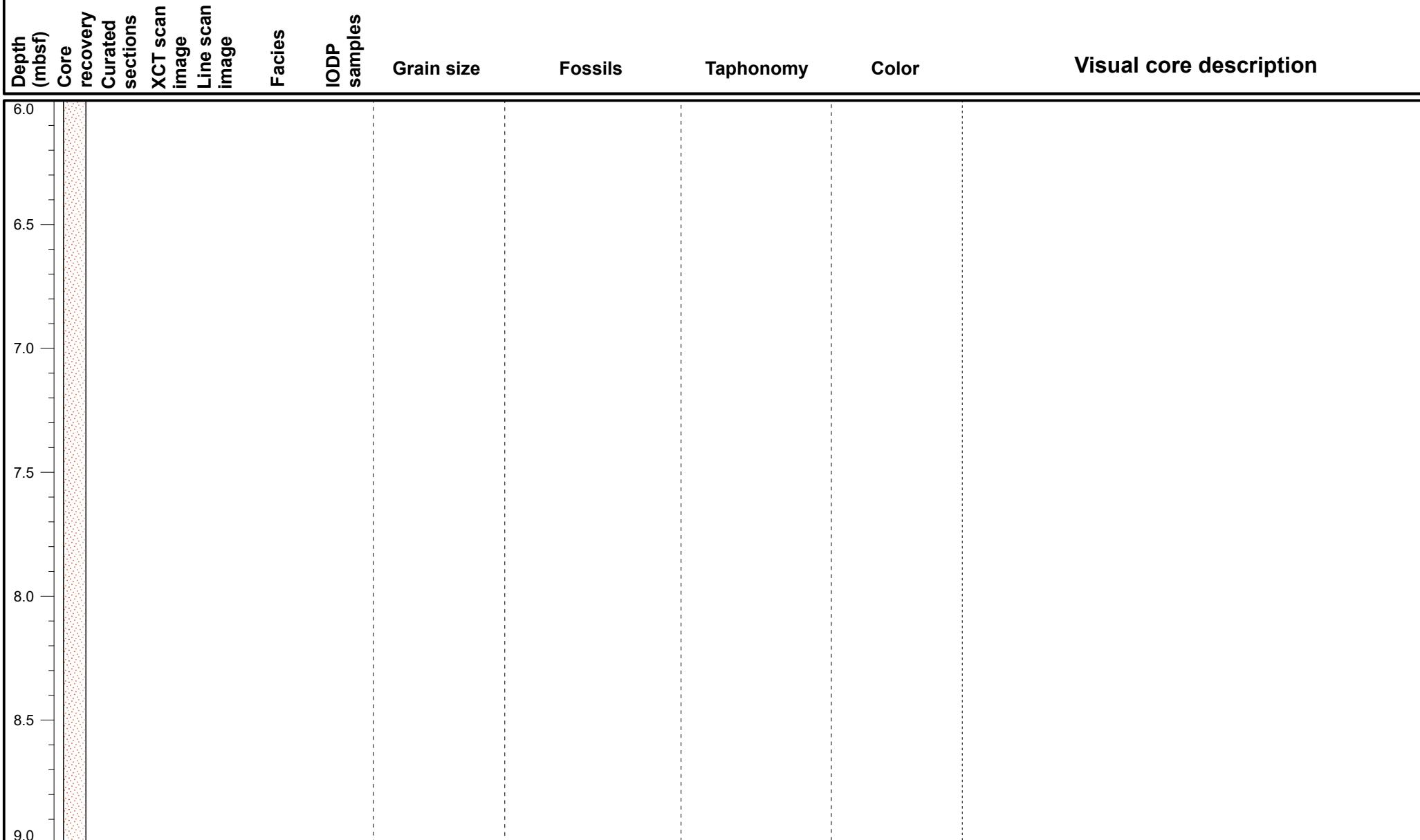
IODP Samples

- ◀ Dating
- + MAD/PW
- GEOCHEM
- ◆ PMAG
- IWRH

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

VCD legend

Core recovery

- █ Core recovered
- █ No recovery
- █ Wash bore
- █ High disturbance

- █ FRW-CorAlgBound
- █ FRW-CorAlgMicrobBound
- █ FRW-MicrobAlgBound
- █ FRW-MicrobBound

Facies

- █ FRW-AlgBound
- █ RDST/FLST-Rhodoliths
- █ DET-Consolidated
- █ DET-Unconsolidated

- █ Mixed-carb/vol
- █ VOL-Clast
- █ VOL-Basalt
- █ FALL

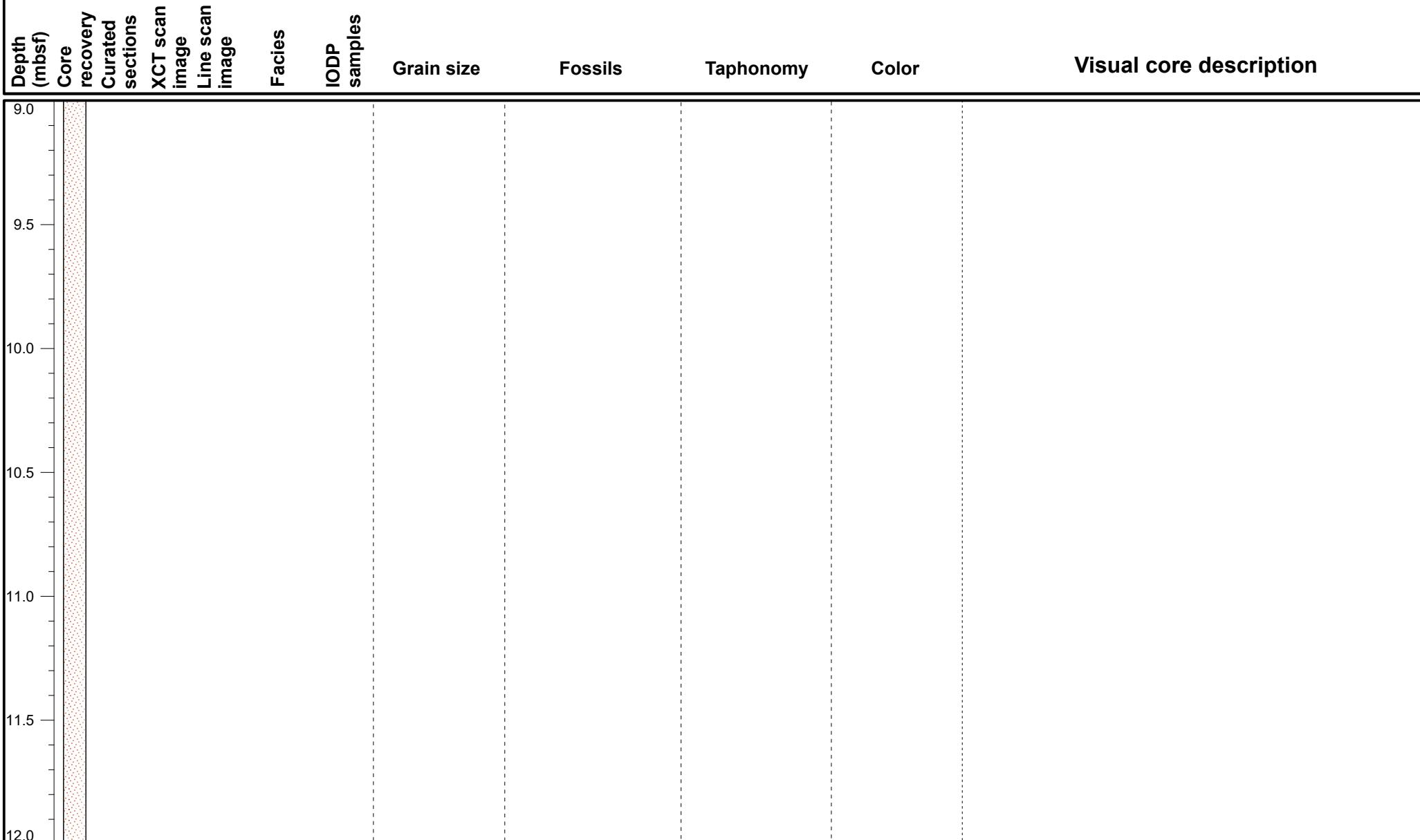
IODP Samples

- ◀ Dating
- █ GEOCHEM
- IWRH
- + MAD/PW
- ◆ PMAG

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

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VCD legend

Core recovery

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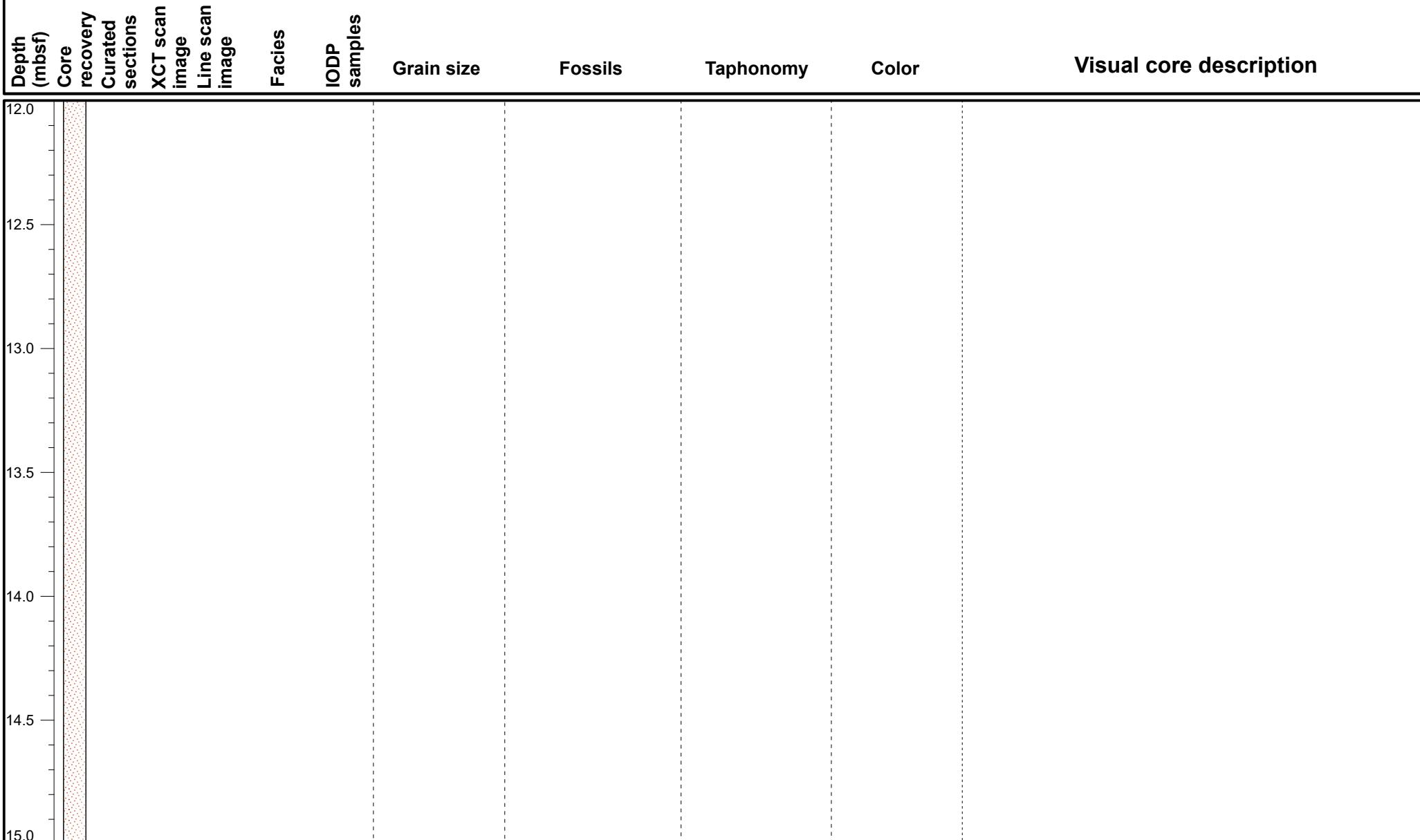
IODP Samples

- ◀ Dating
- GEOCHEM
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- █ VOL-Clast
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- █ FALL

IODP Samples

- ◀ Dating
- █ GEOCHEM
- IWRH
- + MAD/PW
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IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
15.0											
15.5											
16.0											
16.5											
17.0											
17.5											
18.0											

VCD legend

Core recovery

- Core recovered
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- ▨ Wash bore
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- FRW-CorAlgMicrobBound
- FRW-MicrobAlgBound
- FRW-MicrobBound

Facies

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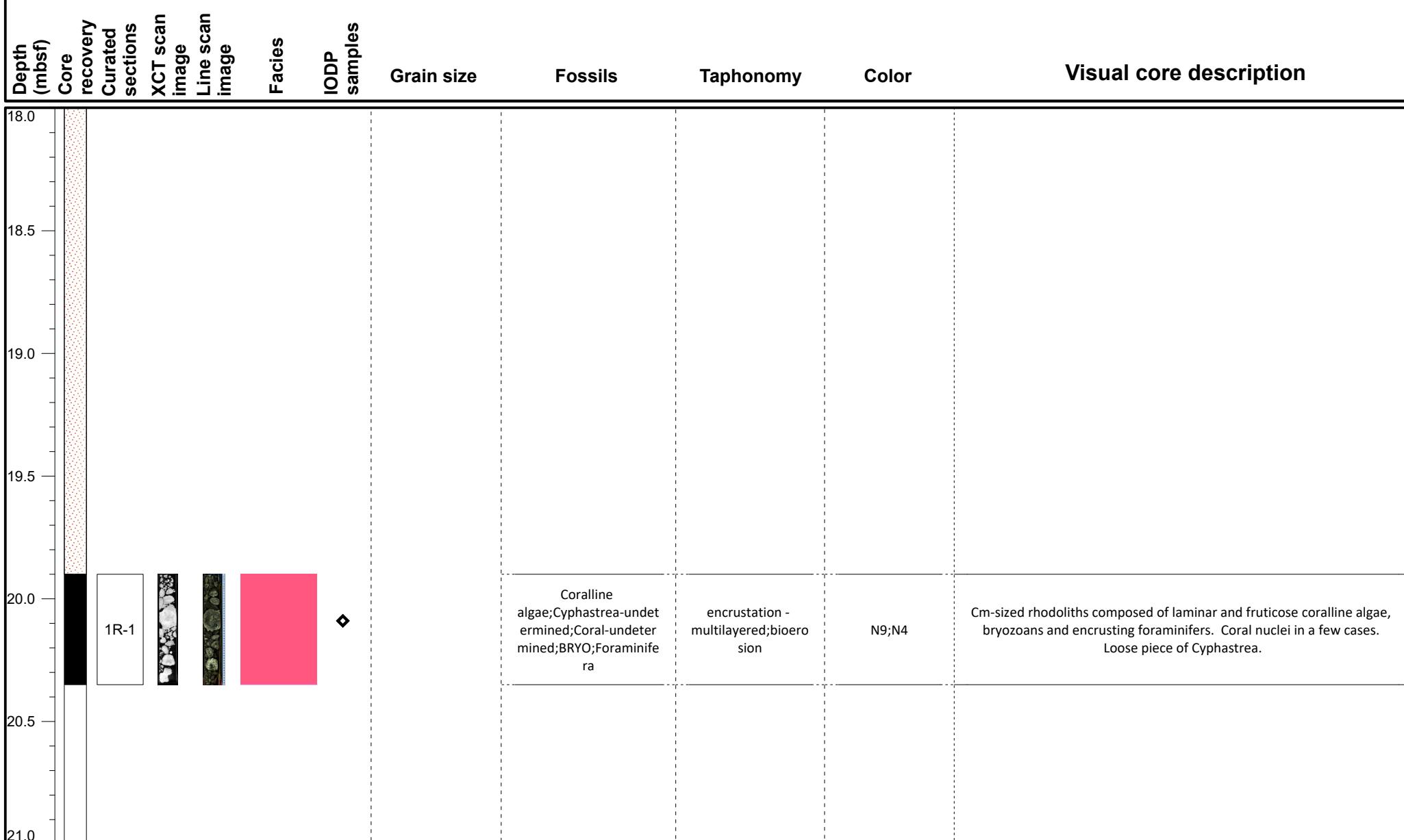
IODP Samples

- ◀ Dating
- +
- MAD/PW
- GEOCHEM
- ◆ PMAG
- IWRH

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Site: M0102C

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Region: Kohala
Water Depth: 415.9 m

VCD legend	Core recovery	Facies	IODP Samples
<ul style="list-style-type: none"> Core recovered No recovery Wash bore High disturbance 	<ul style="list-style-type: none"> █ FRW-CorAlgBound █ FRW-CorAlgMicrobBound █ FRW-MicrobAlgBound █ FRW-MicrobBound 	<ul style="list-style-type: none"> █ FRW-AlgBound █ RDST/FLST-Rhodoliths █ DET-Consolidated █ DET-Unconsolidated 	<ul style="list-style-type: none"> ◀ Dating □ GEOCHEM ○ IWRH + MAD/PW ◆ PMAG

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VCD legend

Core recovery

- Core recovered
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Facies

- The legend identifies six distinct geological models or boundary conditions:

 - FRW-CorAlgBound
 - FRW-AlgBound
 - FRW-CorAlgMicrobBound
 - RDST/FLST-Rhodoliths
 - FRW-MicrobAlgBound
 - DET-Consolidated
 - FRW-MicrobBound
 - DET-Unconsolidated

IODP Samples

- Dating + MAD/PW
□ GEOCHEM ◆ PMAG
○ IWRH

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Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
24.0			4R-1					Coralline algae;Porites-submassive;Porites-massive	encrustation - multilayered;bioerosion	5Y 8/1;N9;N4	Fragments of Porites boundstone with thin CCA crusts. Coral dirty with fine dark sediment. Pockets of unconsolidated sediments.
24.5			5R-1					Coralline algae;Porites-massive;Leptastrea-encrusting;Vermetidae	encrustation - multilayered;bioerosion	5Y 8/1;N9;N4	Fragments of coral boundstone with thick CCA crusts, with large vermetids?. Coral dirty with fine dark sediment..
25.0			6R-1					Coralline algae;Porites-massive;Vermetidae;Leptoseris-foliateous;Porites-submassive	encrustation - multilayered;bioerosion	5Y 8/1;N9;N4	Fragments of coral boundstone with CCA crusts, with vermetids. Coral dirty with fine dark sediment. Coral margins bored.
25.5			7R-1					Coralline algae;Porites-massive;Porites-submassive;Leptastrea-encrusting;Montipora-encrusting;Porites-unetermined;Mollusc	encrustation - multilayered;bioerosion	5Y 8/1;N9;N4	Coral and fragments of coral with thin CCA crusts. Coral dirty from fine dark sediment. Corals bored.
27.0											

VCD legend	Core recovery	Facies	IODP Samples
<ul style="list-style-type: none"> Core recovered No recovery Wash bore High disturbance 	<ul style="list-style-type: none"> FRW-CorAlgBound FRW-CorAlgMicrobBound FRW-MicrobAlgBound FRW-MicrobBound 	<ul style="list-style-type: none"> FRW-AlgBound RDST/FLST-Rhodoliths DET-Consolidated DET-Unconsolidated 	<ul style="list-style-type: none"> Dating GEOCHEM IWRH MAD/PW PMAG

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Facies

- The legend identifies six geological units:

 - FRW-CorAlgBound
 - FRW-AlgBound
 - FRW-CorAlgMicrbBound
 - RDST/FLST-Rhodoliths
 - FRW-MicrobAlgBound
 - DET-Consolidated
 - FRW-MicrobBound
 - DET-Unconsolidated

IODP Samples

- Dating + MAD/PW
GEOCHEM ♦ PMAG
IWRH

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30.0								ned;Porites-platy;Vermetidae			
30.5		11R-1						Porites-undetermined;Coralline algae;Porites-encrusting ;Cyphastrea-encrusting	encrustation - multilayered;bioerosion	N4;N9	Fragments of coralgal-microbialite boundstone with Porites and Pavona, with CCA crusts, and thrombolitic microbialite crust. Corals dirty due to dark sediment. Pockets of unconsolidated sediment with bioclasts.
31.0		12R-1						Porites-undetermined;Coralline algae;Vermetidae;Pavona-columnar;Pavona-undetermined;Coral-encrusting;Leptoseris-platy	encrustation - multilayered;bioerosion	N4;N9	Coralgal-microbialite boundstone with dominant columnar Pavona and Porites, with CCA crusts, generally thin with vermetids, and massive to dendritic thrombolitic microbialite crust. Corals dirty due to dark sediment. Pockets of unconsolidated sediment with bioclasts.
31.5											
32.0		13R-1						Coralline algae;Vermetidae;Pavona-columnar;Pavona-undetermined;Porites-branched;Millepora	encrustation - multilayered;bioerosion	N4;N9	Fragments of coralgal-microbialite boundstone with dominant Pavona and branching Porites, with CCA crusts, generally thin, with vermetids, and thrombolitic and laminated microbialite crust. Corals dirty due to dark sediment..
32.5											
33.0											

VCD legend

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- Core recovered
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- Wash bore
- High disturbance

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- FRW-CorAlgMicropBound
- FRW-MicropAlgBound
- FRW-MicropBound
- FRW-AlgBound
- RDST/FLST-Rhodoliths
- DET-Consolidated
- DET-Unconsolidated

Facies

- Mixed-carb/vol
- VOL-Clast
- VOL-Basalt
- FALL

IODP Samples

- Dating
- GEOCHEM
- IWRH
- MAD/PW
- PMAG

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
33.0		14R-1				◆		Coralline algae;Vermetidae;Porites branching;Leptoseris-endocrusting;Echinoderm	encrustation - multilayered;bioerosion	N4;N9	Coralgal-microbialite boundstone with dominant branching Porites, with thin CCA crusts, with vermetids, and massive laminated (few thrombolitic) microbialite crust. Corals dirty due to dark sediment. Pockets of unconsolidated dark sediment. Frequent echinoid spines.
33.5											
34.0		15R-1				◆		Coralline algae;Porites-branching;Echinoderm;Porites-platy;Porites-submassive	encrustation - multilayered;bioerosion	N4;N9	Coralgal-microbialite boundstone with branching and platy Porites, with thin CCA crusts, and massive to dendritic thrombolitic microbialite crust. Corals dirty due to dark sediment. Pockets of unconsolidated dark sediment..
34.5											
35.0		16R-1				◆		Coralline algae;Porites-branching;Echinoderm;Porites-foliateous;Porites-undetermined;Pavona-columnar;Cyphastrea-encrusting	encrustation - multilayered;bioerosion	N4;N9	Coralgal-microbialite boundstone with branching Porites, columnar Pavona and encrusting Cyphastrea, with thin CCA crusts, and massive thrombolitic microbialite crust. Corals dirty due to dark sediment. Pockets of unconsolidated dark sediment..
35.5		17R-1				◆		Coralline algae;Porites-branching;Vermetidae;Echinoderm			Coralgal-microbialite boundstone with branching Porites, with thin CCA crusts locally with vermetids, and massive thrombolitic microbialite crust. Corals dirty due to dark sediment. Pockets of unconsolidated dark bioclastic sediment..
36.0											

VCD legend	Core recovery	Facies	IODP Samples
<ul style="list-style-type: none"> █ Core recovered □ No recovery ▨ Wash bore ▢ High disturbance 	<ul style="list-style-type: none"> FRW-CorAlgBound FRW-CorAlgMicrobBound FRW-MicrobAlgBound FRW-MicrobBound 	<ul style="list-style-type: none"> FRW-AlgBound RDST/FLST-Rhodoliths DET-Consolidated DET-Unconsolidated 	<ul style="list-style-type: none"> ◆ Dating □ GEOCHEM ○ IWRH + MAD/PW ◆ PMAG

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
36.0											
36.5		17R-2				◆		Coralline algae;Porites-branching; Vermetidae;Porites-undetermined;Porites-columnar;Coral-encrusting;Pavona-columnar;Echinoderm;Pavona-encrusting	encrustation - multilayered;bioerosion	N4:N9	Coralgal-microbialite boundstone with branching Porites and columnar Pavona, with thin CCA crusts locally with vermetids and a FCA, and massive thrombolitic microbialite crust. Corals dirty due to dark sediment. Pockets of unconsolidated dark bioclastic sediment..
37.0						○					
37.5											
38.0						◊					
38.5		18R-1						Coralline algae;Porites-branching; Vermetidae;Porites-undetermined;Echinoderm; Pavona-encrusting;Homotremia;Coral-cup-solitary;Porites-massive;Porites-platy;Gastropod	encrustation - multilayered;bioerosion	N4:N9	Coralgal-microbialite boundstone with branching, platy and massive Porites, with thin CCA crusts locally with vermetids, and massive thrombolitic microbialite crust. Corals dirty due to dark sediment. Pockets of unconsolidated dark bioclastic sediment with abundant echinoid spines, gastropod shells, CCA and solitary corals..
39.0											

VCD legend

Core recovery

- █ Core recovered
- No recovery
- ▨ Wash bore
- ▢ High disturbance

- █ FRW-CorAlgBound
- █ FRW-CorAlgMicrobBound
- █ FRW-MicrobAlgBound
- █ FRW-MicrobBound

Facies

- █ FRW-AlgBound
- █ RDST/FLST-Rhodoliths
- █ DET-Consolidated
- █ DET-Unconsolidated

- █ Mixed-carb/vol
- █ VOL-Clast
- █ VOL-Basalt
- █ FALL

IODP Samples

- ◀ Dating
- +
- MAD/PW
- ◻ GEOCHEM
- ◆ PMAG
- IWRH

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
39.0											
39.5											
40.0											
40.5											
41.0	19R-1					◆					
41.5	19R-2										
42.0	20R-1										

VCD legend

Core recovery

- █ Core recovered
- No recovery
- ▨ Wash bore
- ▢ High disturbance

Facies

- | | | |
|-------------------------|------------------------|------------------|
| █ FRW-CorAlgBound | █ FRW-AlgBound | █ Mixed-carb/vol |
| █ FRW-CorAlgMicrobBound | █ RDST/FLST-Rhodoliths | ▢ VOL-Clast |
| █ FRW-MicrobAlgBound | █ DET-Consolidated | ▢ VOL-Basalt |
| █ FRW-MicrobBound | █ DET-Unconsolidated | ▢ FALL |

IODP Samples

- | | |
|-----------|----------|
| ◀ Dating | ✚ MAD/PW |
| □ GEOCHEM | ◆ PMAG |
| ○ IWRH | |

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
42.0							+/-	Bivalve			With Heterocentrotus spine.. Major minerals: aragonite;calcite
42.5											
43.0							+/-	Porites-submassive;Corals;Intra-algae;Gastropod;Porites-laminar;Porites-columnar;Bivalve	bioerosion;encrustation - multilayered	N9;5Y 4/1;5Y 8/4	Coralgal microbialite boundstone with laminar to columnar to submassive Porites, thinly encrusted with coralline algae and thick microbialite crusts. Microbialite is incorporating biotrital sediments. Major minerals: aragonite;calcite
43.5											
44.0							+/-				
44.5											
45.0							+/-	Porites-massive;Porites-submassive;Coralline algae;Cyphastrea-undet			Coralgal microbialite boundstone composed of massive to submassive corals, with thin algal crusts, and abundant microbialite (massive to thrombolitic). Corals are porites, pavona and cyphastrea.

VCD legend

Core recovery

- Core recovered
- No recovery
- Wash bore
- High disturbance

- FRW-CorAlgBound
- FRW-CorAlgMicrobBound
- FRW-MicrobAlgBound
- FRW-MicrobBound

Facies

- FRW-AlgBound
- RDST/FLST-Rhodoliths
- DET-Consolidated
- DET-Unconsolidated

- Mixed-carb/vol
- VOL-Clast
- VOL-Basalt
- FALL

IODP Samples

- Dating
- GEOCHEM
- IWRH
- MAD/PW
- PMAG

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
45.0								ermined;Vermetidae;Pa vona-undetermined			Some cavities are filled by biotrital sediments.. Major minerals: aragonite;calcite
45.5									bioerosion;encrustation - multilayered	N9;5Y 4/1;5Y 8/4	
46.0						◆					
46.2	22R-2							Porites-massive;Corallin e algae;Pavona-encrusting ;Echinoderm;Poritidae-s ubmassive			Coralgal microbialite boundstone composed of submassive - massive Porites, and Pavona (encrusting) with thin algal crusts, and microbialite. Major minerals: aragonite;calcite
46.5							+				
46.8						◆					
47.0											
47.5	23R-1						+	Coralline algae;Porites-branching; Porites-massive			Coralgal microbialite boundstone composed of a columnar to massive Porites, with thin algal crusts, and abundant microbialite (laminar to dendritic). Some branching corals.. Major minerals: aragonite;calcite
48.0											

VCD legend	Core recovery	Facies	IODP Samples
	<ul style="list-style-type: none"> █ Core recovered □ No recovery ▨ Wash bore ▢ High disturbance 	<ul style="list-style-type: none"> █ FRW-CorAlgBound █ FRW-CorAlgMicrobBound █ FRW-MicrobAlgBound █ FRW-MicrobBound █ RDST/FLST-Rhodoliths █ DET-Consolidated █ DET-Unconsolidated █ FRW-AlgBound █ VOL-Clast █ VOL-Basalt █ FALL 	<ul style="list-style-type: none"> ◀ Dating □ GEOCHEM ○ IWRH ✚ MAD/PW ◆ PMAG

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
48.0									bioerosion;encrustation - multilayered	N9;5Y 4/1;5Y 8/4	
48.5											
49.0											
49.5											
50.0											
50.5											
51.0											

23R-2

Coralline algae;Gastropod;Echinoderm;Vermifidae;Coral-massive;Coral-branching;Cyphastrea-undetermined;Porites-encrusting

bioerosion;encrustation - multilayered

N9;5Y 4/1;5Y 8/4

Coralgal microbialite boundstone composed of a massive Porites, with thin algal crusts, and microbialite (thrombolitic massive to laminar). Major minerals: aragonite;calcite

24R-1

Coralline algae;Gastropod;Echinoderm;Vermifidae;Coral-massive;Coral-branching;Cyphastrea-undetermined;Porites-encrusting

bioerosion;encrustation - multilayered

N9;5Y 4/1;5Y 8/4

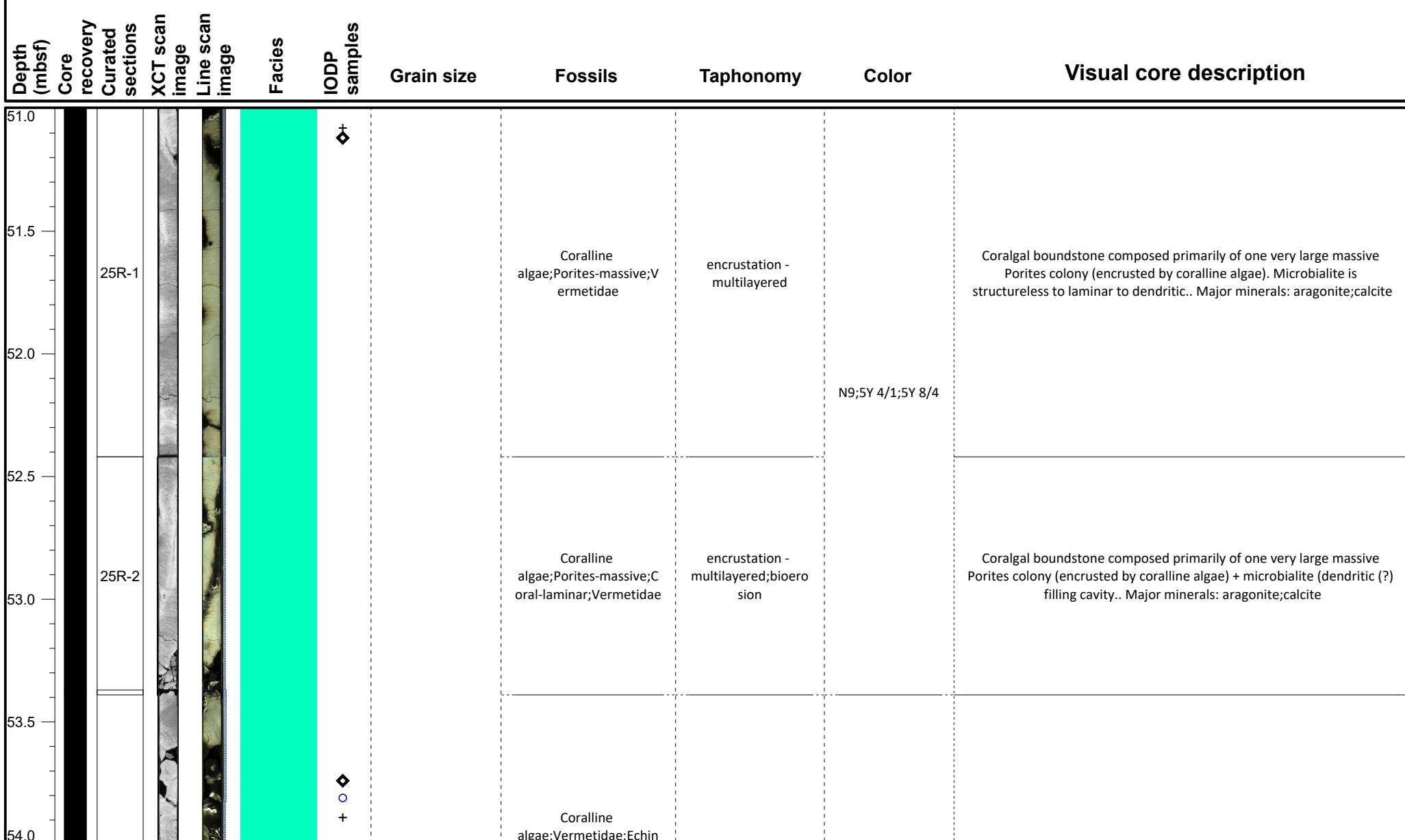
Coralgal microbialite boundstone composed of a massive Porites, with algal crusts, and microbialite. At the base, complex assemblage of CCA and encrusting corals. Major minerals: aragonite;calcite

VCD legend	Core recovery	Facies	IODP Samples
	<ul style="list-style-type: none"> Core recovered No recovery Wash bore High disturbance 	<ul style="list-style-type: none"> FRW-CorAlgBound FRW-CorAlgMicrobBound FRW-MicrobAlgBound FRW-MicrobBound FRW-AlgBound RDST/FLST-Rhodoliths DET-Consolidated DET-Unconsolidated 	<ul style="list-style-type: none"> Dating MAD/PW GEOCHEM PMAG IWRH

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

VCD legend

Core recovery

- █ Core recovered
- No recovery
- ▨ Wash bore
- ▢ High disturbance

- █ FRW-CorAlgBound
- █ FRW-CorAlgMicrobBound
- █ FRW-MicrobAlgBound
- █ FRW-MicrobBound

Facies

- █ FRW-AlgBound
- █ RDST/FLST-Rhodoliths
- █ DET-Consolidated
- █ DET-Unconsolidated

- █ Mixed-carb/vol
- █ VOL-Clast
- █ VOL-Basalt
- █ FALL

IODP Samples

- ◀ Dating
- GEOCHEM
- IWRH
- +
- ◆ PMAG

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
54.0		26R-1						oderm;Mollusc;Cyphastrea-encrusting;Porites-branching;Porites-massive;Bivalve;Gastropod;Porites-submassive			Coralgal microbialite boundstone composed massive-sub massive Porites, algal crusts, and abundant microbialite (massive structureless to dendritic) - cavities partially filled with poorly consolidated, dark grey sediment (containing bioclasts). Major minerals: aragonite;calcite
54.5									encrustation - multilayered;bioerosion	N9;5Y 4/1;5Y 8/4	
55.0		26R-2				◆		Coralline algae;Vermidae;Porites-submassive;Cyphastrea-undetermined;Gastropod;Porites-massive;Echinoderm			Coralgal microbialite boundstone composed mainly of one colony of massive Porites. Some cavities filled by CCA and microbialite (massive structureless to thrombolite). Some biotrital sediment in cavities.
55.5						+					Encrusting Merulinidae + Fungiidae-sol described on offshore VCD.. Major minerals: aragonite;calcite
56.0						□					
56.5											
57.0		27R-1				◆		Coralline algae;Vermidae;Porites-branching;Cyphastrea-encrusting;Porites-sub	encrustation - multilayered;bioerosion		Coralgal microbialite boundstone composed sub-massive to massive Porites. Some branching corals. cavities filled by CCA and microbialite (thrombolite to laminar to structureless). CCA crusts are thick Some internal sediment in cavities.
						+					

VCD legend	Core recovery	Facies	IODP Samples
	<ul style="list-style-type: none"> █ Core recovered □ No recovery ▨ Wash bore ▢ High disturbance 	<ul style="list-style-type: none"> █ FRW-CorAlgBound █ FRW-CorAlgMicrobBound █ FRW-MicrobAlgBound █ FRW-MicrobBound █ RDST/FLST-Rhodoliths █ DET-Consolidated █ DET-Unconsolidated █ FRW-AlgBound █ VOL-Clast █ VOL-Basalt █ FALL 	<ul style="list-style-type: none"> ◀ Dating □ GEOCHEM ○ IWRH + ◆ PMAG

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
57.0						◀		assive;Gastropod;Echino derm;Porites-massive		N9;Y 4/1;Y 8/4	Merulinidae- encrusting observed during in WC (offshore VCD).. Major minerals: aragonite;calcite
57.5						◊					Coralgal microbialite boundstone composed columnar corals. Cavities filled by CCA and microbialite (laminar massive to columnar)
58.0	27R-2					○		Coralline algae;Vermetidae;Coral- laminar;Porites-undeter- mined	encrustation - multilayered		Cavities are filled by secondary bidetrital sediments (echinoid spines, bivalves, gastropods).
58.5											Merulinidae-encrusting (in offshore VCD sheet). Major minerals: aragonite;calcite
59.0						◊					
59.5	28R-1							Coralline algae;Porites-columnar; Vermetidae;Gastropod; Echinoderm;Bivalve;Pori- tes-massive;Cyphastrea- encrusting	encrustation - multilayered		Coralgal microbialite boundstone composed of columnar and massive corals. CCA and microbialite (laminar- dendritic). Some internal sediment in cavities. . Major minerals: aragonite;calcite
60.0											

VCD legend

Core recovery

- █ Core recovered
- No recovery
- ▨ Wash bore
- ▨ High disturbance

- █ FRW-CorAlgBound
- █ FRW-CorAlgMicrobBound
- █ FRW-MicrobAlgBound
- █ FRW-MicrobBound

Facies

- █ FRW-AlgBound
- █ RDST/FLST-Rhodoliths
- █ DET-Consolidated
- █ DET-Unconsolidated

- █ Mixed-carb/vol
- █ VOL-Clast
- █ VOL-Basalt
- █ FALL

IODP Samples

- ◀ Dating
- +
- MAD/PW
- GEOCHEM
- ◆ PMAG
- IWRH

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
60.0						□				N9;5Y 4/1;5Y 8/4	
60.5											
61.0					Coralline algae;Porites-massive;Vermetidae;Cyphastrea-encrusting	◊		encrustation - multilayered;bioerosion			Coralgal microbialite boundstone composed of submassive to massive corals. CCA and microbialite (laminated to structureless). Some internal sediment in cavities. . Major minerals: aragonite;calcite
61.5											
62.0					Coralline algae;Porites-columnar; Porites-massive;Vermetidae;Cyphastrea-encrusting;Porites-submassive;Porites-branching	◊		encrustation - multilayered;bioerosion			Coralgal microbialite boundstone composed of columnar, submassive, massive to branching Porites. Encrusting cyphastrea present. Thin CCA and microbialite (structureless to laminar - columnar) are encrusting corals. . Major minerals: aragonite;calcite
62.5											
63.0											

VCD legend

Core recovery

- █ Core recovered
- No recovery
- ▨ Wash bore
- ▨ High disturbance

- █ FRW-CorAlgBound
- █ FRW-CorAlgMicrobBound
- █ FRW-MicrobAlgBound
- █ FRW-MicrobBound

Facies

- █ FRW-AlgBound
- █ RDST/FLST-Rhodoliths
- █ DET-Consolidated
- █ DET-Unconsolidated

- █ Mixed-carb/vol
- █ VOL-Clast
- █ VOL-Basalt
- █ FALL

IODP Samples

- ◀ Dating
- GEOCHEM
- IWRH
- +
- ◆ PMAG

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
63.0											
63.5		29R-2				○		Coralline algae;Porites-massive;Vermetidae;Porites-submassive;Porites-undetermined		N9;5Y 4/1;5Y 8/4;N4	Coralgal microbialite boundstone composed of submassive and massive Porites. CCA crusts with vermetids and microbialite (massive laminated) are encrusting corals. Corals stained by dark sediment. Large boring (Trypanites). Dark sediment pockets. Major minerals: aragonite;calcite
64.0											
64.5		30R-1				◊		Coralline algae;Porites-massive;Vermetidae;Cyphastrea-e ncrusting;Porites-columnar;Arthropod	encrustation - multilayered;bioerosion	N9;5Y 4/1;5Y 8/4;N4	Coralgal microbialite boundstone composed of columnar and massive Porites. CCA crusts with vermetids and microbialite massive (laminated and thrombolitic) are encrusting corals. Encrusting Cyphastrea on CCA at the on the Porites tips. Corals stained by dark sediment. Small barnacle. Dark sediment in cavities Major minerals: aragonite;calcite
65.0						+					
65.5						□					
66.0		30R-2				◊		Coralline algae;Porites-massive;Porites-columnar			Coralgal microbialite boundstone composed of columnar and massive Porites.Thin CCA crusts and microbialite massive (thrombolitic) are encrusting corals. Corals stained by dark sediment. Dark sediment in cavities

VCD legend

Core recovery

- █ Core recovered
- No recovery
- ▨ Wash bore
- ▢ High disturbance

- █ FRW-CorAlgBound
- █ FRW-CorAlgMicrobBound
- █ FRW-MicrobAlgBound
- █ FRW-MicrobBound

Facies

- █ FRW-AlgBound
- █ RDST/FLST-Rhodoliths
- █ DET-Consolidated
- █ DET-Unconsolidated

- █ Mixed-carb/vol
- █ VOL-Clast
- █ VOL-Basalt
- █ FALL

IODP Samples

- ◀ Dating
- + MAD/PW
- GEOCHEM
- ◆ PMAG
- IWRH

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
66.0											. Major minerals: aragonite;calcite
66.5											
67.0	31R-1										
67.5											
68.0											
68.5	32R-1										
69.0											

VCD legend

Core recovery

- █ Core recovered
- No recovery
- ▨ Wash bore
- ▨ High disturbance

- █ FRW-CorAlgBound
- █ FRW-CorAlgMicrobBound
- █ FRW-MicrobAlgBound
- █ FRW-MicrobBound

Facies

- █ FRW-AlgBound
- █ RDST/FLST-Rhodoliths
- █ DET-Consolidated
- █ DET-Unconsolidated

- █ Mixed-carb/vol
- █ VOL-Clast
- █ VOL-Basalt
- █ FALL

IODP Samples

- ◀ Dating
- +
- MAD/PW
- GEOCHEM
- ◆ PMAG
- IWRH

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
69.0						◆		Coralline algae;Porites-massive;Vermetidae;Mollusc;Echinoderm;Halimeda;Porites-submassive			Coralgal microbialite boundstone composed of massive Porites. Thin CCA crusts with vermetids, and thin microbialite are encrusting corals. Corals stained by dark sediment. Dark unconsolidated sediment in cavities with volcanoclastic components, echinoid spines, mollusc, Halimeda and CCA.. Major minerals: aragonite;calcite
69.5		32R-2				□					
70.0											
70.5											
71.0											
71.5		33R-1				□		Coralline algae;Vermetidae;Porites-branched;Pocillopora-undetermined;Cyphastrea-encrusting;Serp	encrustation - multilayered;bioerosion	N9;5Y 4/1;5Y 8/4;N4	Coralgal boundstone composed of branching Porites. Thin CCA crusts with vermetids, and thin microbialite (structureless) often on top of corals. Encrusting Cyphastrea. Corals stained by dark sediment. Large volumes of dark sediment both consolidated and unconsolidated as matrix in the framework. Friable crust at 70 cm (possible sequence boundary?).. Major minerals: aragonite;calcite
72.0											

VCD legend

Core recovery

- █ Core recovered
- No recovery
- ▨ Wash bore
- ▢ High disturbance

- █ FRW-CorAlgBound
- █ FRW-CorAlgMicrobBound
- █ FRW-MicrobAlgBound
- █ FRW-MicrobBound

Facies

- █ FRW-AlgBound
- █ RDST/FLST-Rhodoliths
- █ DET-Consolidated
- █ DET-Unconsolidated

- █ Mixed-carb/vol
- █ VOL-Clast
- █ VOL-Basalt
- █ FALL

IODP Samples

- ◀ Dating
- +
- MAD/PW
- ◻ GEOCHEM
- ◆ PMAG
- IWRH

IODP Expedition 389 VCD

Site: M0102C

Hole M0102C

Region: Kohala
Water Depth: 415.9 m

Depth (mbsf)	Core recovery	Curated sections	XCT scan image	Line scan image	Facies	IODP samples	Grain size	Fossils	Taphonomy	Color	Visual core description
72.0								Coralline algae;Porites-branched; Cyphastrea-encrusting; Serpentinite;Porites-platy;Millepora;Echinoderm;Mollusc			Coralgal boundstone composed of branching and platy Porites. Thin CCA crusts, and thin microbialite (structureless) often on top of corals. Encrusting Millepora. Corals stained by dark sediment. Dark sediment both consolidated and unconsolidated as matrix in the framework. Friable crust at 18 cm.. Major minerals: aragonite;calcite
72.5		33R-2									
73.0											

VCD legend

Core recovery

- █ Core recovered
- No recovery
- ▨ Wash bore
- ▨ High disturbance

- █ FRW-CorAlgBound
- █ FRW-CorAlgMicrobBound
- █ FRW-MicrobAlgBound
- █ FRW-MicrobBound

Facies

- █ FRW-AlgBound
- █ RDST/FLST-Rhodoliths
- █ DET-Consolidated
- █ DET-Unconsolidated

- █ Mixed-carb/vol
- █ VOL-Clast
- █ VOL-Basalt
- █ FALL

IODP Samples

- ◀ Dating
- +
- MAD/PW
- GEOCHEM
- ◆ PMAG
- IWRH