

Processing the samples...



Arrival in UK



Washing up ...



Cataloging...



Processing the samples...



Arrival in UK



Washing up ...



Cataloging... Volunteer Programme-NHM



Samarinda (Batu Putih TF76)



Pliocen
e

Messinian

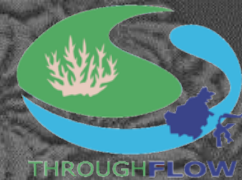
Tortonian

Serravallia
n

Langhia
n

Burdigalian

Samarinda (Batu Putih TF76)



Pliocen
e

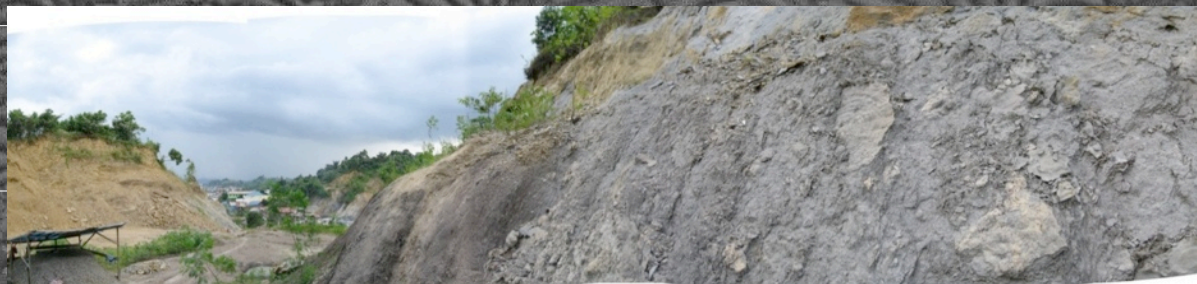
Messinian

Tortonian

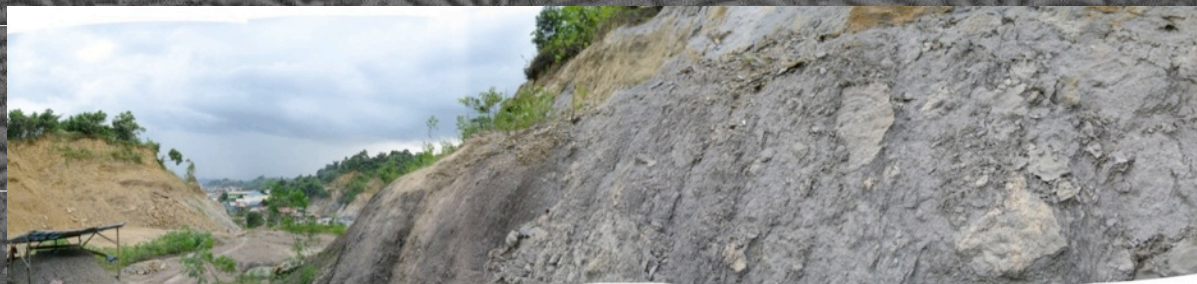
Serravallia
n

Langhia
n

Burdigalian



Samarinda (Batu Putih TF76)



Pliocen
e
Messinian
Tortonian
Serravallia
n
Langhia
n
Burdigalian

Samarinda (Batu Putih TF76)



Pliocene
Messinian
Tortonian
Serravallian
Langhian
Burdigalian

Samarinda: Top reef Stadion (TF51-TF57)



Pliocene
Messinian
Tortonian
Serravallian
Langhian
Burdigalian

Halimeda

Platy corals in
Clay matrix

Lst algae,
LBF, platy

Lst platy &
Lenses of
branching

Sandstone
Bran/Tabular

Coal

Samarinda: Top reef Stadion (TF51-TF57)



Pliocene
 Messinian
 Tortonian
 Ferravallia
Langhian
 Burdigalia



Halimeda

Platy corals in
 Clay matrix

Lst algae,
 LBF, platy



Lst platy &
 Lenses of
 branching

Sandstone
 Bran/Tabular

Coal

Samarinda: Top reef Stadion (TF51-TF57)



Halimeda

Platy corals in
Clay matrix

Lst algae,
LBF, platy



Coal

Pliocene

Messinian

Tortonian

Serravallian

Langhian

Burdigalian

Bontang: 3D Reef (TFI 26)



Pliocene
Messinian
ortonian
Serravallian
Langhian
Burdigalian



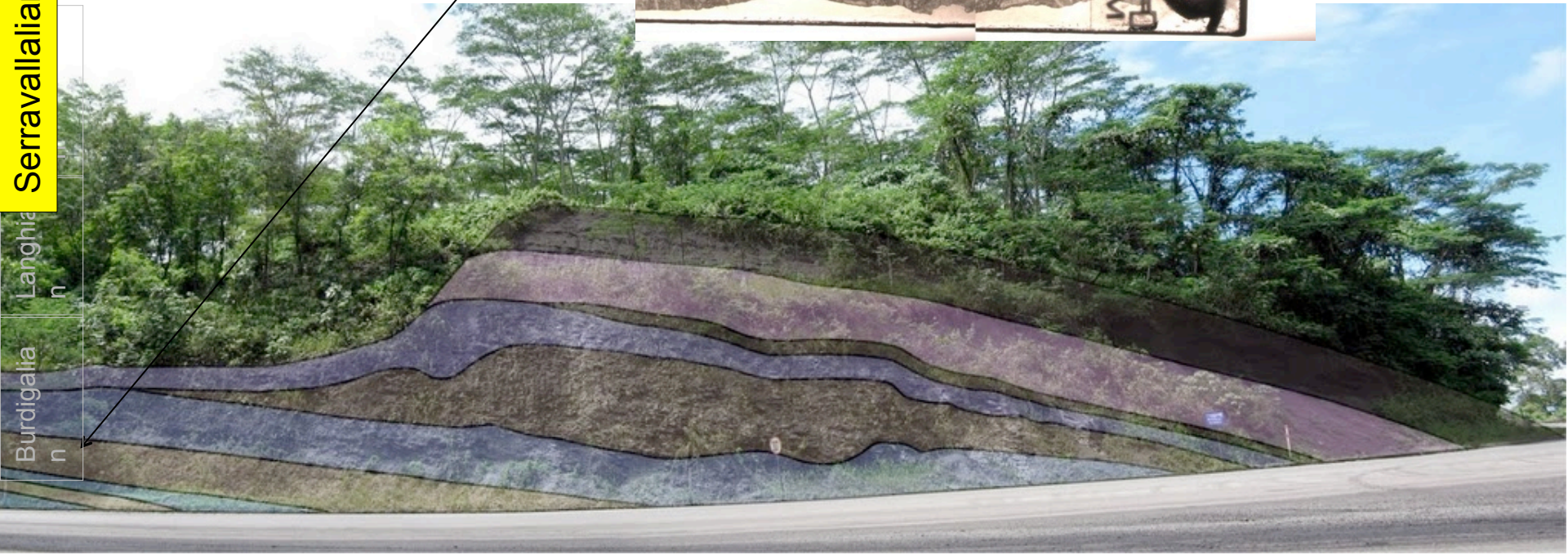
Bontang: 3D Reef (TFI 26)

Pliocene
Messinian
Bortonian
Serravallian
Langhian
Burdigalian

Unit 3



0.5 cm



Bontang: 3D Reef (TFI 26)



Pliocene
Messinian
ortonian
Serravallian
Langhian
Burdigalian



Bontang: 3D Reef (TFI 26) Unit 4



Pliocene
e
Messinian
ortonian
Serravallian
Langhian
n
Burdigalian
n



0.5-2 cm



Bontang: 3D Reef (TFI 26)

Unit 4

Unit 4-5



Pliocene
e
Messinian
ortonian
Serravallian
Langhian
n
Burdigalian
n



0.5-2 cm

0.5-3 cm



Bontang: 3D Reef (TFI26)



Unit 4

Unit 4-5

Unit 5

Pliocene

Messinian

ortonian

Serravallian

Langhian

Burdigalian



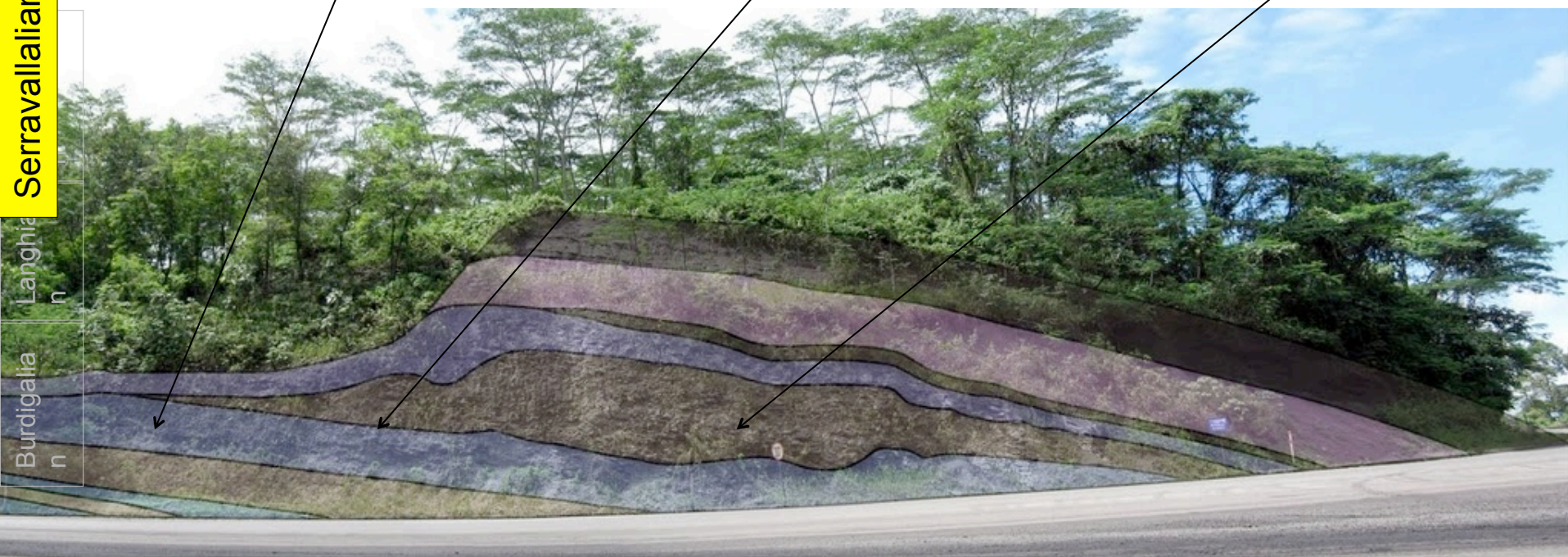
0.5-2 cm



0.5-3 cm



1.5-10.5 cm



Bontang: 3D Reef (TFI 26)



Pliocene

Messinian

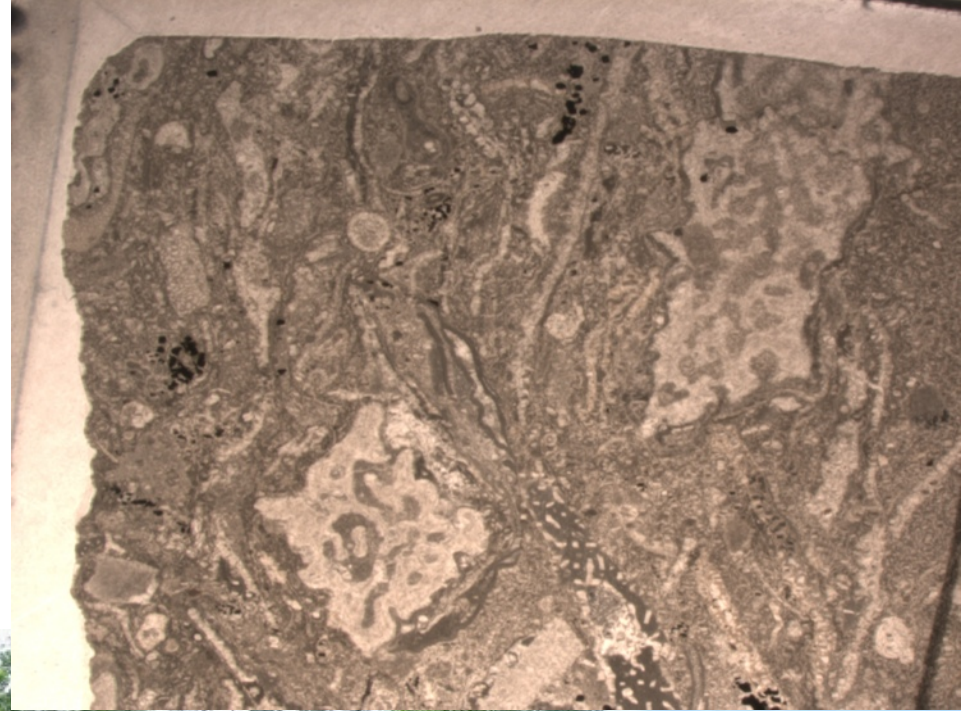
Serravallian

Burdigalian

Langhian

Burdigalian

Burdigalian

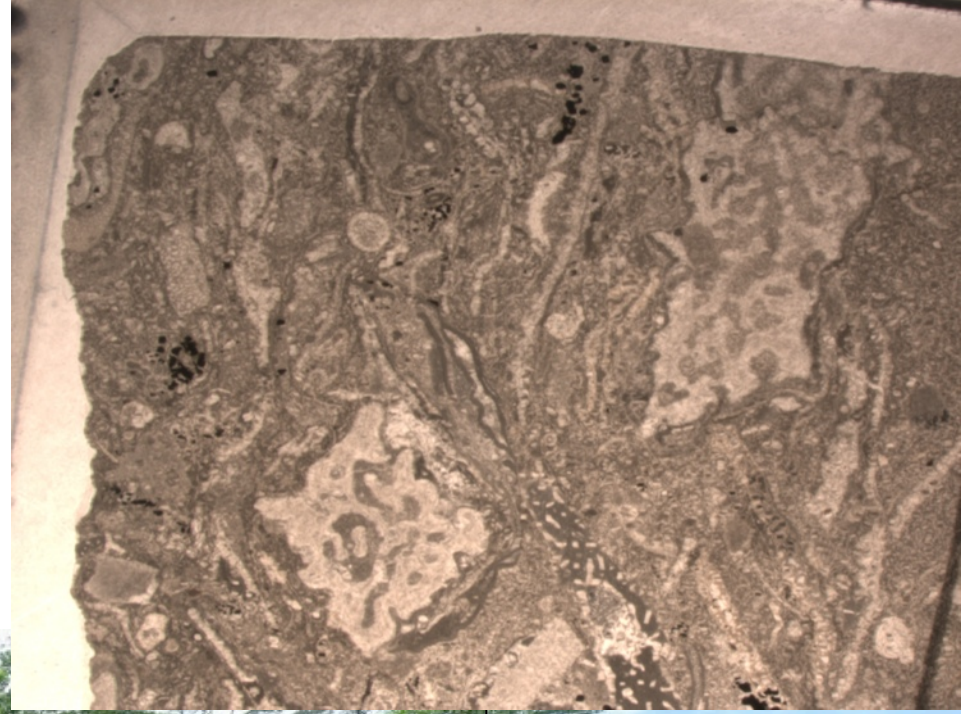


Bontang: 3D Reef (TFI 26)

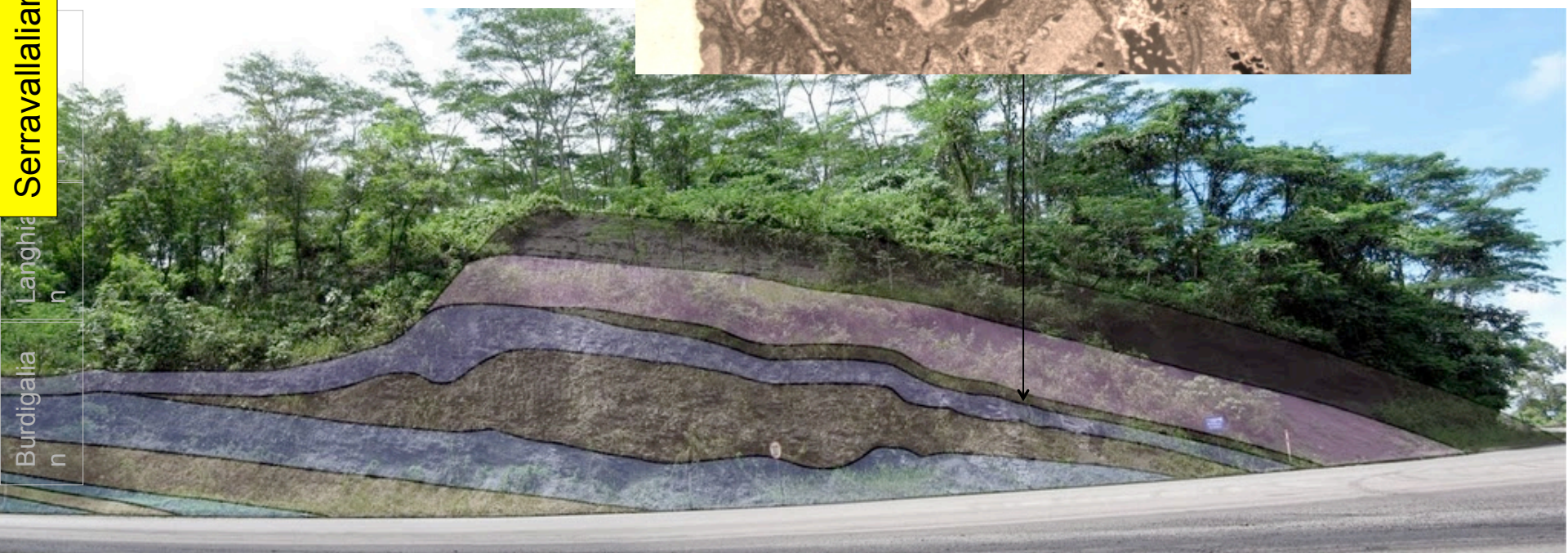


Pliocene
Messinian
ortonian
Serravallian
Langhian
Burdigalian

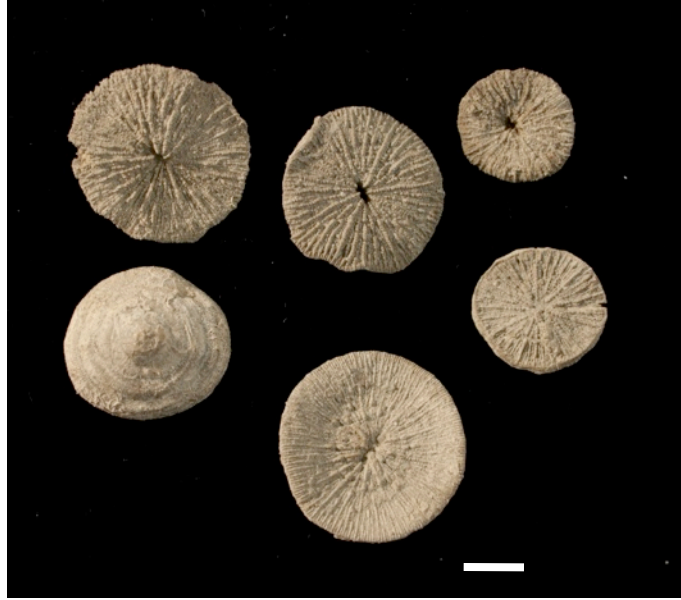
**Unit 6
LBF+CCA**



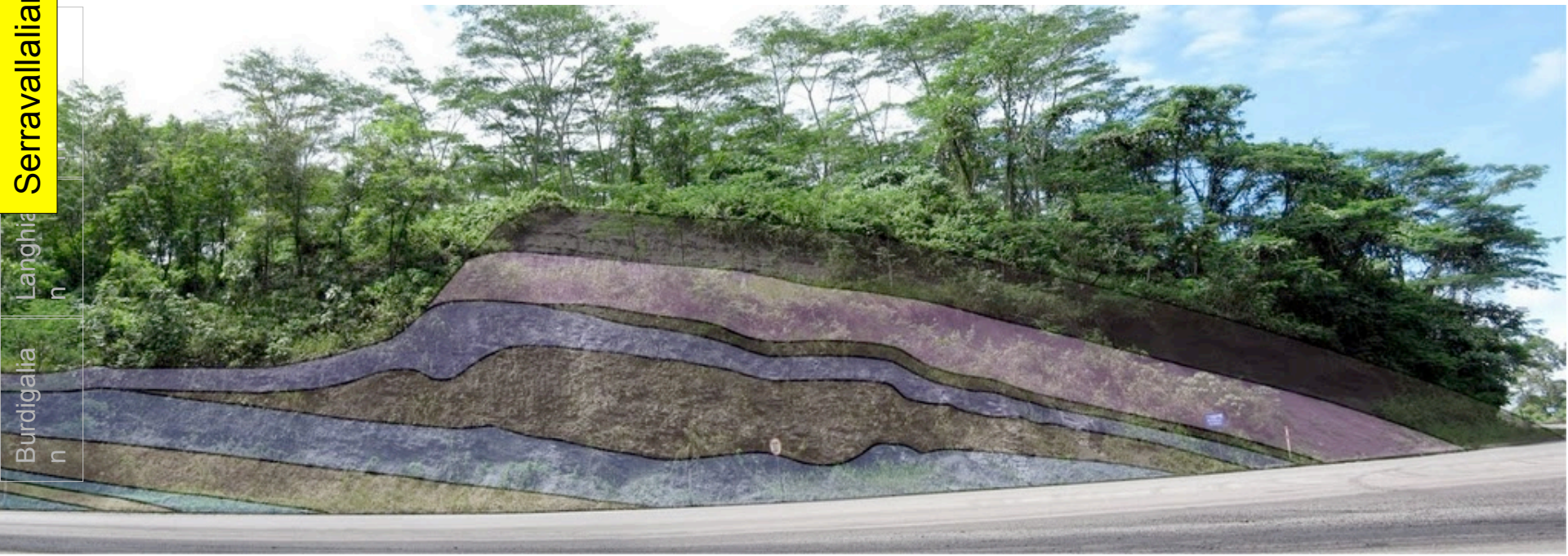
0.2 cm



Bontang: 3D Reef (TFI 26)



Pliocene
Messinian
Bartonian
Serravallian
Langhian
Burdigalian



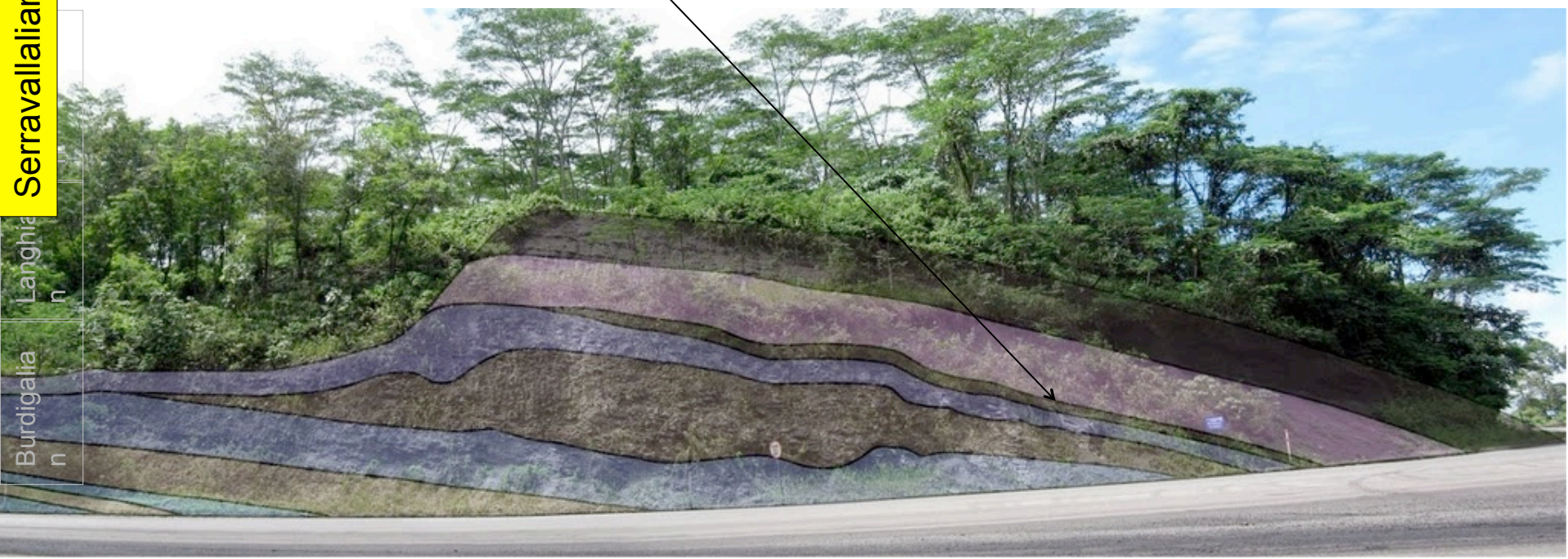
Bontang: 3D Reef (TFI 26)



Unit 7



- Pliocene
- Messinian
- Burtonian
- Serravallian**
- Langhian
- Burdigalian



3D Reef (TFI26)

Pliocene
Messinian
ortonian
Serravallian
Langhian
Burdigalian

Order	Family	Morphospecies	UNIT 4	UNIT 5	UNIT 7	
Scleractinia	Acroporidae	Astreopora -like	1		1	
	Agariciidae	Agariciidae				1
		Leptoseris cf. floriformis	1		2	
		Leptoseris fingerprint	1		1	
		Pachyseris sp.			1	
		Cyathoseris cf. lophiophora	1		2	
	Astrocoenidae	Stylocoeniella sp.1	3			
		Stylocoeniella sp.2	1		2	
	Dendrophylliidae	Turbinaria -like	1			
		Turbinaria sp.2			2	
	Faviidae	Cyphastraea sp. 3			1	
		Echinopora sp.2	3	1	2	
		Faviidae		1		
		Montastraea sp.	1			
	Fungiidae	Lithophyllon sp.1			1	
		Fungia (Cycloseris) sp.1 cf sinensis	1		1	
	Meruliniidae	Hydnophora -like	1			
		Hydnophora sp. 2			1	
	Mussidae	Mussidae sp.1	2		1	
	Pectiniidae	Echinophyllia sp.1			1	
		Echinophyllia -like sp.4			1	
		Echinophyllia -like sp.5			1	
		Echinophyllia sp.2	1			
		Echinophyllia sp.3			1	
		Fungophyllia sp.1 cf. aspera	1		2	
		Fungophyllia sp.2 cf millepunctata		1	1	
		Mycedium -like			1	
Poritidae	Goniopora sp.2	1		1		
	Porites -like	3	2	2		
	Porites sp.1			1		
Siderastreidae	Psammocora sp.1	1				
NN	Branching	1	2	2		
	Columnar-faceloide?	1				
	Corrugate		1			
	Echinopora		1			
	Flowery		1			
	Fragments	1				
	NN		1			
	Reticular	1	2			
	Septocostae		1			
	Solitary	2	1	1		
	Undet	1		2		
	Wavy		1			
	Octocorallia	? Nephteidae	? Nephteidae	1		
Isididae		Isis sp.	1			

3D Reef (TFI26)

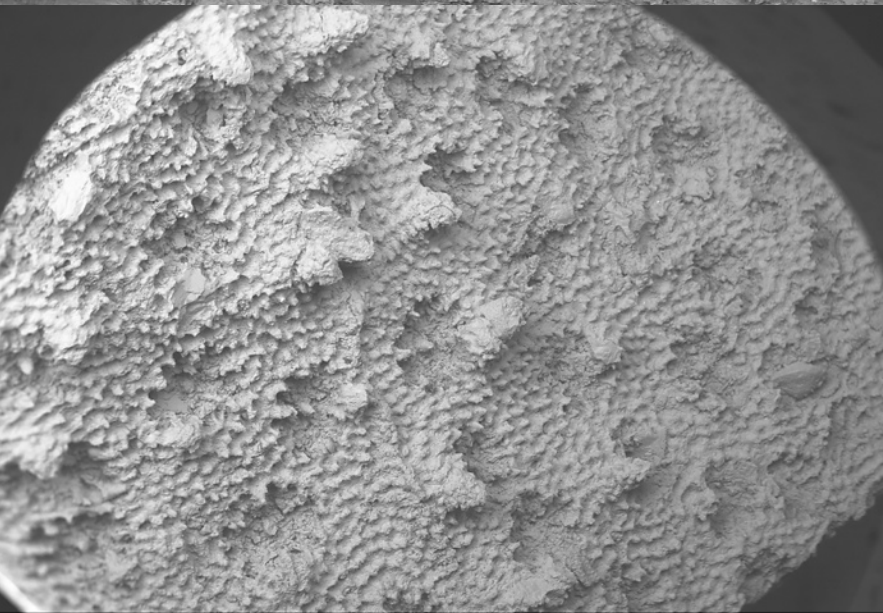


1 mm Mag = 30 X EHT = 15.00 KV Signal A = BSD File Name = nsa0035.tif
WD = 25 mm Spot Size = 500 Chamber = 19 Pa

Serravallo	n
Langhina	n
Burdigalia	n

Order	Family	Morphospecies	UNIT 4	UNIT 5	UNIT 7	
Scleractinia	Acroporidae	Astreopora -like	1		1	
	Agariciidae	Agariciidae			1	
		Leptoseris cf. floriformis	1		2	
		Leptoseris fingerprint	1		1	
		Pachyseris sp.			1	
		Cyathoseris cf. lophiophora	1		2	
	Astrocoeniidae	Stylocoeniella sp.1	3			
		Stylocoeniella sp.2	1		2	
	Dendrophylliidae	Turbinaria -like	1			
		Turbinaria sp.2			2	
	Faviidae	Cyphastrea sp. 3			1	
		Echinopora sp.2	3	1	2	
Faviidae			1			
Montastraea sp.		1				
Fungiidae	Lithophyllon sp.1			1		
	Fungia (Cycloseris) sp.1 cf sinensis	1		1		
Meruliniidae	Hydnophora -like	1				
	Hydnophora sp. 2			1		
Mussidae	Mussidae sp.1	2		1		
Pectiniidae	Echinophyllia sp.1			1		
	Echinophyllia -like sp.4			1		
	Echinophyllia -like sp.5			1		
	Echinophyllia sp.2	1				
	Echinophyllia sp.3			1		
	Fungophyllia sp.1 cf. aspera	1		2		
	Fungophyllia sp.2 cf millepunctata		1	1		
	Mycedium -like			1		
Poritidae	Goniopora sp.2	1		1		
	Porites -like	3	2	2		
	Porites sp.1			1		
Siderastreidae	Psammocora sp.1	1				
NN	Branching	1	2	2		
	Columnar-faceloide?	1				
	Corrugate		1			
	Echinopora		1			
	Flowery		1			
	Fragments	1				
	NN		1			
	Reticular	1	2			
	Septocostae		1			
	Solitary	2	1	1		
	Undet	1		2		
	Wavy		1			
	Octocorallia	? Nephteidae	? Nephteidae	1		
		Isididae	Isis sp.	1		

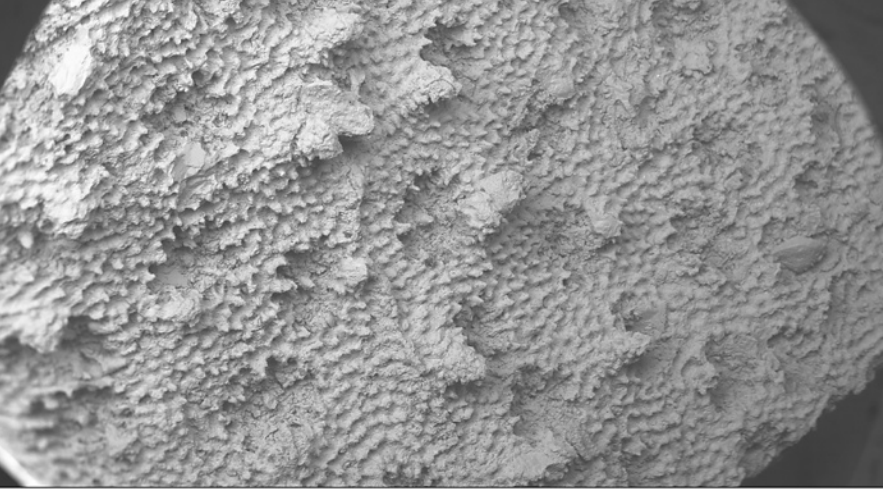
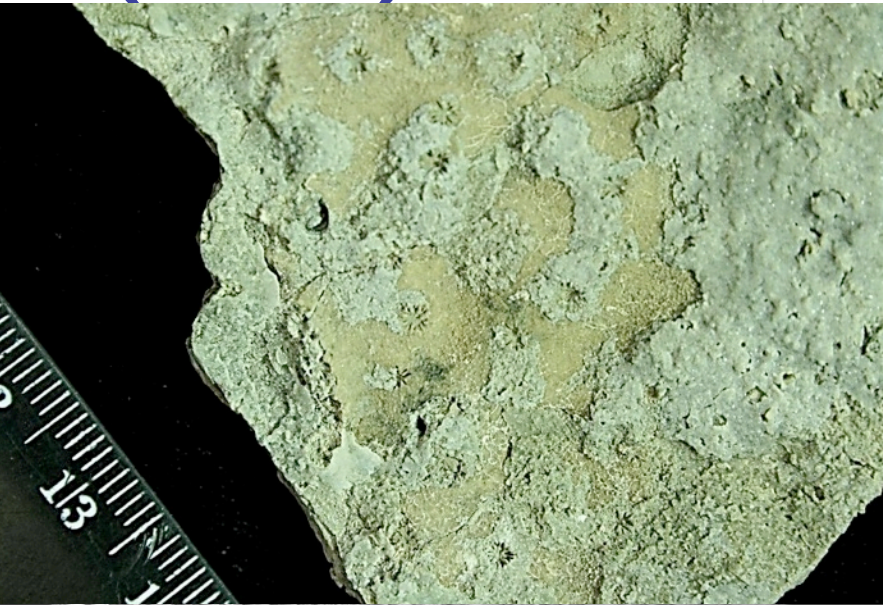
3D Reef (TFI26)



1 mm Mag = 32 X EHT = 15.00 kV Signal A = BSD File Name = nsa0033.tif
 WD = 16 mm Spot Size = 500 Chamber = 19 Pa

Order	Family	Morphospecies	UNIT 4	UNIT 5	UNIT 7
Scleractinia	Acroporidae	Astreopora -like	1		1
	Agariciidae	Agariciidae			1
		Leptoseris cf. floriformis	1		2
		Leptoseris fingerprint	1		1
		Pachyseris sp.			1
		Cyathoseris cf. lophiophora	1		2
	Astrocoeniidae	Stylocoeniella sp.1	3		
		Stylocoeniella sp.2	1		2
	Dendrophylliidae	Turbinaria -like	1		
		Turbinaria sp.2			2
	Faviidae	Cyphastrea sp. 3			1
		Echinopora sp.2	3	1	2
		Faviidae		1	
		Montastraea sp.	1		
	Fungiidae	Lithophyllon sp.1			1
Fungia (Cycloseris) sp.1 cf sinensis		1		1	
Meruliniidae	Hydnophora -like	1			
	Hydnophora sp. 2			1	
Mussidae	Mussidae sp.1	2		1	
Pectiniidae	Echinophyllia sp.1			1	
	Echinophyllia -like sp.4			1	
	Echinophyllia -like sp.5			1	
	Echinophyllia sp.2	1			
	Echinophyllia sp.3			1	
	Fungophyllia sp.1 cf. aspera	1		2	
	Fungophyllia sp.2 cf millepunctata		1	1	
Poritidae	Mycedium -like			1	
	Goniopora sp.2	1		1	
	Porites -like	3	2	2	
Siderastreidae	Porites sp.1			1	
	Psammocora sp.1	1			
	NN	1	2	2	
NN	Columnar-faceloide?	1			
	Corrugate			1	
	Echinopora			1	
	Flowery			1	
	Fragments	1			
	NN			1	
	Reticular	1	2		
	Septocostae			1	
	Solitary	2	1	1	
	Undet	1		2	
	Wavy			1	
	Octocorallia	? Nephteidae	? Nephteidae	1	
	Isididae	Isis sp.	1		

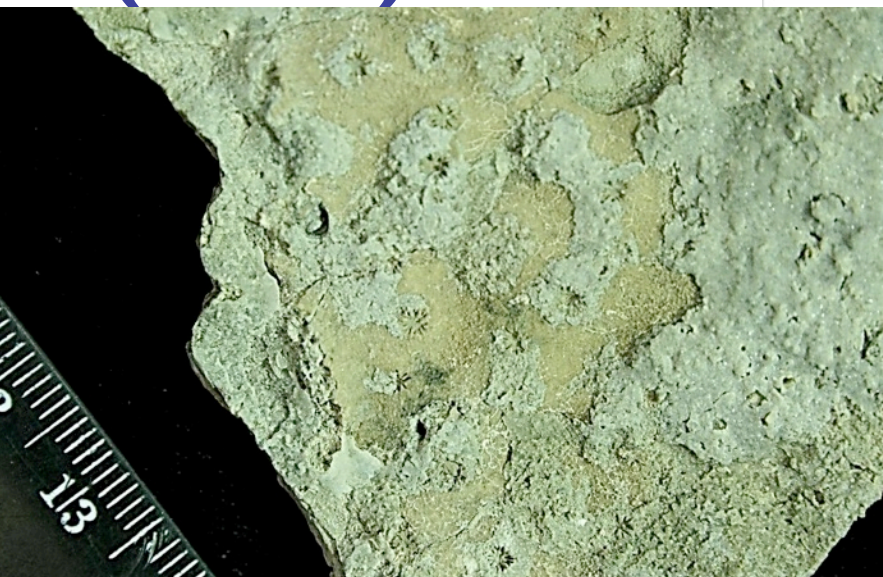
3D Reef (TFI26)



1 mm Mag = 32 X EHT = 15.00 kV Signal A = BSD File Name = nsa0033.tif
WD = 16 mm Spot Size = 500 Chamber = 19 Pa

Order	Family	Morphospecies	UNIT 4	UNIT 5	UNIT 7	
Scleractinia	Acroporidae	Astreopora -like	1		1	
	Agariciidae	Agariciidae				1
		Leptoseris cf. floriformis	1		2	
		Leptoseris fingerprint	1		1	
		Pachyseris sp.			1	
		Cyathoseris cf. lophiophora	1		2	
	Astrocoeniidae	Stylocoeniella sp.1	3			
		Stylocoeniella sp.2	1		2	
	Dendrophylliidae	Turbinaria -like	1			
		Turbinaria sp.2			2	
	Faviidae	Cyphastrea sp. 3			1	
		Echinopora sp.2	3	1	2	
		Faviidae		1		
		Montastraea sp.	1			
	Fungiidae	Lithophyllon sp.1			1	
		Fungia (Cycloseris) sp.1 cf sinensis	1		1	
	Meruliniidae	Hydnophora -like	1			
		Hydnophora sp. 2			1	
	Mussidae	Mussidae sp.1	2		1	
Pectiniidae	Echinophyllia sp.1			1		
	Echinophyllia -like sp.4			1		
	Echinophyllia -like sp.5			1		
	Echinophyllia sp.2	1				
	Echinophyllia sp.3			1		
	Fungophyllia sp.1 cf. aspera	1		2		
	Fungophyllia sp.2 cf millepunctata		1	1		
	Mycedium -like			1		
Poritidae	Goniopora sp.2	1		1		
	Porites -like	3	2	2		
	Porites sp.1			1		
Siderastreidae	Psammocora sp.1	1				
NN	Branching	1	2	2		
	Columnar-faceloide?	1				
	Corrugate		1			
	Echinopora		1			
	Flowery		1			
	Fragments	1				
	NN		1			
	Reticular	1	2			
	Septocostae		1			
	Solitary	2	1	1		
	Undet	1		2		
	Wavy		1			
Octocorallia	? Nephteidae	? Nephteidae	1			
	Isididae	Isis sp.	1			

3D Reef (TFI26)



Order	Family	Morphospecies	UNIT 4	UNIT 5	UNIT 7
Scleractinia	Acroporidae	Astreopora -like	1		1
	Agariciidae	Agariciidae			1
		Leptoseris cf. floriformis	1		2
		Leptoseris fingerprint	1		1
		Pachyseris sp.			1
		Cyathoseris cf. lophiophora	1		2
	Astrocoeniidae	Stylocoeniella sp.1	3		
		Stylocoeniella sp.2	1		2
	Dendrophylliidae	Turbinaria -like	1		
		Turbinaria sp.2			2
Faviidae	Cyphastrea sp. 3			1	
	Echinopora sp.2	3	1	2	
	Faviidae		1		
	Montastraea sp.	1			
Fungiidae	Lithophyllon sp.1			1	
	Fungia (Cycloseris) sp.1 cf sinensis	1		1	
Meruliniidae	Hydnophora -like	1			
	Hydnophora sp. 2			1	
Mussidae	Mussidae sp.1	2		1	
Pectiniidae	Echinophyllia sp.1			1	
	Echinophyllia -like sp.4			1	
	Echinophyllia -like sp.5			1	
	Echinophyllia sp.2	1			
	Echinophyllia sp.3			1	
	Fungophyllia sp.1 cf. aspera	1		2	
	Fungophyllia sp.2 cf millepunctata		1	1	
	Mycedium -like			1	
Poritidae	Goniopora sp.2	1		1	
	Porites -like	3	2	2	
	Porites sp.1			1	
Siderastreidae	Psammocora sp.1	1			
NN	Branching	1	2	2	
	Columnar-faceloide?	1			
	Corrugate		1		
	Echinopora		1		
	Flowery		1		
	Fragments	1			
	NN		1		
	Reticular	1	2		
	Septocostae		1		
	Solitary	2	1	1	
	Undet	1		2	
	Wavy		1		
	Octocorallia	? Nephteidae	? Nephteidae	1	
	Isididae	Isis sp.	1		

3D Reef (TFI26)



Order	Family	Morphospecies	UNIT 4	UNIT 5	UNIT 7
Scleractinia	Acroporidae	Astreopora -like	1		1
	Agariciidae	Agariciidae			1
		Leptoseris cf. floriformis	1		2
		Leptoseris fingerprint	1		1
		Pachyseris sp.			1
		Cyathoseris cf. lophiophora	1		2
	Astrocoeniidae	Stylocoeniella sp.1	3		
		Stylocoeniella sp.2	1		2
	Dendrophylliidae	Turbinaria -like	1		
		Turbinaria sp.2			2
Faviidae	Cyphastraea sp. 3			1	
	Echinopora sp.2	3	1	2	
	Faviidae		1		
	Montastraea sp.	1			
Fungiidae	Lithophyllon sp.1			1	
	Fungia (Cycloseris) sp.1 cf sinensis	1		1	
Meruliniidae	Hydnophora -like	1			
	Hydnophora sp. 2			1	
Mussidae	Mussidae sp.1	2		1	
Pectiniidae	Echinophyllia sp.1			1	
	Echinophyllia -like sp.4			1	
	Echinophyllia -like sp.5			1	
	Echinophyllia sp.2	1			
	Echinophyllia sp.3			1	
	Fungophyllia sp.1 cf. aspera	1		2	
	Fungophyllia sp.2 cf millepunctata		1	1	
Poritidae	Mycedium -like			1	
	Goniopora sp.2	1		1	
	Porites -like	3	2	2	
Siderastreidae	Porites sp.1			1	
	Psammocora sp.1	1			
	NN	Branching	1	2	2
Columnar-faceloide?		1			
Corrugate			1		
Echinopora			1		
Flowery			1		
Fragments		1			
NN			1		
Reticular		1	2		
Septocostae			1		
Solitary		2	1	1	
Undet		1		2	
Wavy			1		
Octocorallia		? Nephteidae	? Nephteidae	1	
	Isididae	Isis sp.	1		

Bengalon: Hauling road (TF522)



Pliocene
Messinian
Ansonian
Serravallian
Langhian
Burdigalian

Bengalon: Hauling road (TF522)



Pliocen
e

Messinian

onian

Serravallian

Langhian

Burdig
u

