

Biostratigraphy Cretaceous - Paleocene unconformity

ID	Author	Location	Lithology	Fauna	Ref.	Range				Combined Range				Description		
						Ma / Zone		Age		Ma / Zone		Age				
						FAD	LAD	FAD	LAD	FAD	LAD	FAD	LAD			
1	Cal83	Ravine du Sud	Chalky limestone and silicified limestone	Dicarinella Concovata Globotruncana coronata Globotruncana cyrenaica	1	89,9	84	Coniacian	Santonian	89,9	84	Coniacian	Santonian	Macaya Formation		
2	Cal83	Base Rampe de Marcelline	Bioclastic limestone, pelagic silicified limestone	Globotruncana coronata Globotruncana cyrenaica Globotruncana fornicata Globotruncana arca convexa Globotruncana sigali Globotruncana concavata Globotruncana stuartiformis	1	89,9	79,2	Coniacian	Campanian	86,7	84,2	Santonian	Santonian	Macaya Formation		
3	Cal83	Top Rampe de Marcelline	Argillaceous limestone and pelagic silicified limestone	Globotruncana arca convexa Globotruncana sigali Globotruncana concavata Globotruncana stuartiformis Globotruncana tricarinata Globotruncana stuarti Globotruncana calcarata	1	86,7	67,3	Santonian	Maastrichtian	83,6?	74?	Santonian?	Campanian?	Macaya Formation		
4	Cal83	Tombeau Cheval	Massive limestone with argillaceous intervals, radiolarites and tuffs	Globotruncana arca convexa Micula staurophora Tetralithus murus	1	86,7	67,3	Santonian	Maastrichtian	69	66	Maastrichtian	Maastrichtian	Macaya Formation		
5	Cal83	Plaine Martin	Limestone	Globotruncana stuarti Globotruncana fornicata Globotruncana arca convexa	1	89,9	67,3	Coniacian	Maastrichtian	73	67,3	Campanian	Maastrichtian	Macaya Formation		
6	Cal83	Rivière Glace bridge, road Camp Perrin - Jérémie	Siltstone, claystone, volcanics	Globigerina <Cretaceous> Heterohelix Hedbergella NO Globotruncana	3	P0	P2	Danian	Danian	66	62	Danian	Danian	Rivière Glace Formation; 75m thick clastic sequence		
7	Cal83	1km north of Rivière Glace bridge, road Camp Perrin - Jérémie	Base; Bioclastic limestone with detrital plagioclase intervals Overlying base; limestone overlain by marls/clays Overlying are conglomerates and limestones	Globotruncalia pusilla Globotruncalia uncinata Globotruncalia pseudomenardii Globotruncalia aequa	1	P3a	P4	Danian	Thanetian	62	61	Danian	Selandian	Overlying the Rivière Glace Formation		
8	Cal83	3.5 km SE of Baradères	From clasts in microbreccia Overlain by platform limestone capped by basalt	Globotruncana stuarti Globotruncana arca convexa Globotruncana lapparenti Polyps, gasteropods, algae, mollusks	1	73	67,3	Campanian	Maastrichtian	73	67,3	Campanian	Maastrichtian?	Microbreccia overlain by platform limestones (Baradères Formation) capped by basalts. Probably unconformable on Macaya Formation		
9	Cal83	Between Dame-Marie and Anse-d'Hainaut	Base; deformed Cretaceous basalts Overlying; detrital series with volcanoclastic intervals Top; north; platform limestone	Globotruncalia pseudomenardii	1	P4	P4	Selandian	Thanetian	61	57	Selandian	Thanetian	Deformed Cretaceous basalts unconformably overlain by undeformed clastics and volcanoclastics (Rivière Glace), in turn overlain by platform limestones		
10	Cal83	Between Anse-d'Hainaut and Source Chaudé; Ravine Bras à Droite	Base; deformed Cretaceous basalts Overlying; detrital series with volcanoclastic intervals - samples are reworked fragments	Hedbergella Globigerina <Cretaceous> Globotruncana stuartiformis	3	113	62,5	Albian?	Danian	<66	62,5	<Cret	Danian	Deformed Cretaceous basalts unconformably overlain by undeformed clastic and volcanoclastic sequence (Rivière Glace)		
11	Cal83	Anticline along route Port Salut to Les Cayes	Chalky limestone	Globotruncalia angulata Chiasmolithus danicus Ellipsolithus macellus		P3 NP3 NP4	P4 NP6 NP11	Danian	Thanetian	62,3	59	Danian	Thanetian	Selandian chalky limestones		
12	Cal83	Les Cayes plain, 1 km W of Chantal	Calcarenes and marls overlying Cret basalts	no fauna given, only zones		NP1	NP2	Danian	Danian	66	64,7	Danian	Danian	Calcarenes unconf. overlying deformed Cret. Basalts		
13	VdB83	Between Obledon and Furcy	Marly intercalations within basalts	Globotruncana lapparenti Globotruncana carinata Globotruncana fornicata Heterohelix Watzneria bernesea Micula staurophora	1	86,7	67,3?	Santonian	Maastrichtian?	86,7	84,2	Santonian	Santonian	Intercalations in Dumisseau Formation, deposited under pelagic open marine conditions; CLIP		
14	VdB83	Between Obledon and Furcy	Basalt	none				K/Ar dating on basalts				88	82	Coniacian	Campanian	Basalt of the Dumisseau Formation; CLIP
15	VdB83	SW of Obledon	Platform limestones; Lepidocyclina, Melobesia algae, Miliolida	Ranikothalia sp. (bermudezi) Discocyclina barkeri	3	SBZ4	SBZ5	Thanetian	Ypresian	58	55,5	Thanetian	Ypresian	Platform limestones separated by fault from underlying Cretaceous basalts of 13/14		
16	VdB83	SW of Obledon	Massive chalky limestones; overlying platform limestones of #15	Discoaster barbadensis Discoaster lodoensis Cyclococcolithus formosus Sphenolithus radians Globotruncalia aspensii Globotruncalia bullbrookii Truncorotaloides rohri	2	NP11	NP19-20	Ypresian	Priabonian	53,7	46,3	Ypresian	Lutetian	Massive chalky limestone overlying platform limestones		
17	VdB83	Rivière Gosselin section; Directly NE of Marbial	Marly intercalations within basalts	Manivittella pemmatoides Watzneria bernesea Micula staurophora Marthasterites furcatus Eiffelithus turseiffelli	2	147,7	66	Titonian	Maastrichtian	89,8	72	Coniacian	Campanian	Massif basalts, tuff and sedimentary intercalations of the Dumisseau Formation; CLIP		
18	VdB83	Rivière Gosselin section; Directly SW of Marbial	Massive biomicrite with cherts	Globotruncana elevata Globotruncana fornicata Globotruncana stuartiformis Globotruncana arca convexa Globotruncana calcarata Globotruncana falsostuarti	1	84,2	68?	Campanian	Maastrichtian?	79,2	74	Campanian	Campanian	Base Macaya Formation		
19	VdB83	Rivière Gosselin section; SW of Marbial	Massive biomicrite with cherts	Globotruncana elevata Globotruncana stephensoni Globotruncana contusa Globotruncana lugeoni-gansseri Globotruncana gagnebini	1	84,2	67,3?	Campanian	Maastrichtian?	70,1	67,3	Maastrichtian	Maastrichtian	Top Macaya Formation (total thickness 300m)		
20	VdB83	Rivière Gosselin section; SW of Marbial	Basal conglomerate overlain by clay/silts with volcanic debris and marls	Globigerina pseudobulloides Globigerina triluculoides Globotruncalia edita Globotruncalia compressa	1	Pa	P3	Danian	Selandian	63,9	62,6	Danian	Danian	Marigot Formation; overlying Macaya Formation by (transgressive?) unconformity (160m thick; BRGM88)		
21	VdB83	Macary?; between Marigot and Seguin	Silt/marlstone with sandstone containing grains of basalt (bathyal, open marine)	Globigerina pseudobulloides Globigerina daubergensis	1	Pa	P3	Danian	Selandian	66	62,6	Danian	Danian	Marigot Formation; elements of CLIP basalts within marl-clay-silt-sandstone sequence (>250m thick)		
22	BRGM88	North of Macary?; overlying #19	Argillaceous limestones	Globotruncalia angulata Globotruncalia pseudomenardii	1	P3	P4	Danian	Thanetian	60,7	52,2	Danian	Thanetian	Overlying Marigot Formation (125m thick)		
23	BRGM88	Seguin	Platform limestones	Globotruncalia edgari	1	E2	E3	Ypresian	Ypresian	55,9	54,6	Ypresian	Ypresian	Top of sequence in this region (100m thick)		
24A	Mdl79	Around Grand Savanne?; Route Leogâne to Jacmel	Blocks within the sequence; containing basalts, dolerites, cherts, silicified limestones, massive limestones, sandy limestones	Globotruncana concavata Globotruncana sigali Globotruncana coronata Globotruncana tricarinata (reworked?) Globotruncana stuartiformis Globotruncana arca convexa Globotruncana globigerinoides	1	89,9	84	Coniacian	Santonian	89,9	84,2	Coniacian	Santonian	Series of blocks on the road from Leogâne to Jacmel.		
24B			Matrix from the blocks	Globotruncana marginata (reworked?) Globotruncana stephensoni Globotruncana stuarti Globotruncana stuartiformis	1	93,5	84,2	Turonian	Santonian	73	71,8	Campanian	Maastrichtian	Matrix for the series of blocks		
24C			Overlying Series of blocks; Greywackes with conglomerate intervals	Globotruncana elevata Globotruncana contusa Globotruncana stuarti	1	84,2	67,3?	Campanian	Maastrichtian?	70,1	67,3	Maastrichtian	Maastrichtian	Greywackes and conglomerates unconformably(?) overlying Series of blocks (50m thick roughly)		
24D			Overlying greywackes&conglomerates; Argillaceous limestones	Globotruncana contusa Globotruncana gansseri Globotruncana lugeoni Globotruncana stuarti	1	70,1	67,3	Maastrichtian	Maastrichtian	70,1	67,3	Maastrichtian	Maastrichtian	Argillaceous limestones overlying greywackes&conglomerate interval (at least 450m thick)		
24E			Overlying argillaceous limest.; platform limestones	Ranikothalia sp.	3	SBZ4	SBZ5	Thanetian	Ypresian	58	55,5	Thanetian	Ypresian	Overlying platform limestones		
25			Am97	Policard	Biomicrite with chert thrust over pelitic clastics	Globotruncana calcarata Globotruncana calcarata Globotruncana arca convexa Globotruncana elevata Globotruncana bulloides	1	80	74	Campanian	Campanian	80	74	Campanian	Campanian	Macaya Fm. thrust over Rivière Glace Fm.
26			Am97	Ramp towards Fond Tortue	Massif marly limestone	Globotruncana arca convexa Globotruncana elevata Globotruncana bulloides	1	86,7	67,3	Santonian	Maastrichtian	80	74	Campanian	Campanian	Macaya Formation
27			Am97	Between Baradères and Nicolas(?)	Clasts in conglomerate Platform limestones overlying conglomerate Basalts overlying platform limestones	Globotruncana helvetica Heterohelix sp. Hedbergella Dictyoconus sp. Planorbula cretae	183	100	66	Cenomanian	Maastrichtian	93,5	92,6	<Turonian	>Turonian	Age of clasts in conglomerate discordantly overlying Macaya Fm.
28			Am97	Around Fonds Charlemagne (N of Les Anglais)	Silicious biomicrite	Globotruncana arca convexa Globotruncana stuartiformis Globotruncana contusa Globotruncana lapparenti Globotruncana bulloides	1	86,7	67,3	Santonian	Maastrichtian	70,1	67,3	Maastrichtian	Maastrichtian	Macaya Fm in faulted contact with CLIP basalts
29			Am97	Chanterelle (NE of Les Anglais)	Dm-bedded limestones with basal (micro?) conglomerate containing Macaya Fm. and CLIP basalt clasts, overlying CLIP basalts	Globotruncana arca convexa Globotruncana elevata Globotruncana calcarata Globotruncana lapparenti	1	86,7	67,3	Santonian	Maastrichtian	80	74	Campanian	Campanian	Macaya Fm. overlying CLIP basalts, separated by a (micro?) conglomerate containing clasts of both formations
30			Am97	Franklin (E of Anse-d'Hainaut)	Dacites	none				K/Ar dating on basalts				63	56	Danian
31	Am97	Between Sinaï and Maquisard (N of l'Asile)	Calcareous siltstones with clasts of Macaya Fm	Planorbula cretae	5	??	??	Danian?	Thanetian?	66?	56?	Danian	Thanetian	Rivière Glace Fm. with clasts of Macaya Fm. and interstratified lavas, unconformably overlying CLIP basalts		
32A	Am97	Between Vieux Bourg d'Aquin and l'Asile	Marly limestones	Globotruncana sp.	1	>93,9	<67,3	>Turonian	<Danian	<93,9	>67,3	<Turonian	>Danian	Macaya Fm. limestone thrust over Rivière Glace Fm.		
32B	Am97	Between Vieux Bourg d'Aquin and l'Asile	Calcareous marls/silts with conglomeratic and volcanoclastic intercalations	Globigerina <Cret	3	P0	P2	Danian	Danian	66	61,6	Danian	Danian	Macaya Fm. limestone thrust over Rivière Glace Fm.		
33	Am97	Brioux (western Les Cayes plain)	Base; Clay, silt and sandstone with volcanic grains Top; Biomicrite	Globigerina <Cret Globigerina <Cret Globotruncalia sp.	3	P0	P2	Danian	Danian	66	61,6	Danian	Danian	Well-stratified limestones concordantly overlying detrital sequence		
34	Am97	Tibarra (E of Cavailon)	Base: Basalts with marly intercalations Middle; Microconglomerate Top; Silty limestones	Globotruncana sp. none Micula staurophora Watzneria bernesea Micula prinsii	1	>93,9	<67,3	>Turonian	<Danian	<93,9	>67,3	>Turonian	>Danian	Basalts Microconglomerate separating basalts from overlying silty limestones (Paleocene?) Silty limestones containing reworked Cretaceous fauna unconformably overlying basalts		
35	Am97	Gross Caye (Island S of Aquin)	Pelitic facies with chalky intervals	Micula murus Micula staurophora Tetralithus obscurus	2	69	66	Maastrichtian	Maastrichtian	69	66	Maastrichtian	Maastrichtian	Rivière Glace Fm. with basal conglomerate unconformably overlying CLIP basalts		
36	Am97	L'île à Vache	Siltstones and calcarenites	Globigerina <Cret	3	P0	P2	Danian	Danian	66	61,6	Danian	Danian	Rivière Glace Fm. siltstones and calcarenites unconformably overlying CLIP basalts		

37	Am97	Morne Verdun (SE of Port-a-Piment)	Silts-clays with calcarenites	Chiasmolithus danicus	2	NP3	NP6	Danian	Thanetian	63,5	59,2	Danian	Thanetian	Pelites and calcarenites overlying polymict breccia of basalts, in turn overlying CLIP basalts
38	Am97	Caracoli (between Baradères and Petit-Trou-de-Nippes)	Platform limestones	Ranikothalia sp. (bermudezi)	3	SBZ4	SBZ5	Thanetian	Ypresian	52,57	41,2	Thanetian?	Lutetian	Platform limestones with basal conglomerate unconformably overlying CLIP basalts
				Morozovella aragonensis	2	E5	E9	Ypresian	Lutetian					
				Eoconuloides sp.	3	SBZ4	SBZ20	Thanetian	Priabonian					
39A	RM86	South of Petit Goève	Siliceous biomicrite	Globotruncana gansseri	1	71	67,3	Maastrichtian	Maastrichtian	70,1	67,3	Maastrichtian	Maastrichtian	Top Macaya Formation
				Globotruncana stuarti	1	73	67,3	Campanian	Maastrichtian					
39B	RM86	South of Petit Goève	Biomicrites	Globotruncana stuarti	1	73	67,3	Campanian	Maastrichtian	73	67,3	Campanian	Maastrichtian	Base (?) Macaya Formation
				Globotruncana stuartiformis	1	86,7	67,3	Santonian	Maastrichtian					
40	RM86	Rivière Brossard (2km south of Anse-a-Veau?)	Limestones with chert nodules	Globotruncana stuartiformis	1	86,7	67,3	Santonian	Maastrichtian	86,7	67,3	Santonian	Maastrichtian	Macaya Formation
41	RM86	South of Fond-des-Blancs	Limestones	Globotruncana arca convexa	1	86,7	67,3	Santonian	Maastrichtian	83,6	67,3	Campanian	Maastrichtian	Macaya Formation overlying CLIP basalts
				Globotruncana stephensoni	1	83,6	67,3	Campanian	Maastrichtian					
				Globotruncana stuartiformis	1	86,7	67,3	Santonian	Maastrichtian					
				Globotruncana fornicata	1	89,9	67,3	Coniacian	Maastrichtian					
42	RM86	Rivière Bas-de-la-Croix	Calcirudites	Globotruncana contusa	1	70,1	67,3	Maastrichtian	Maastrichtian	70,1	67,3	Maastrichtian	Maastrichtian	Macaya Formation
				Globotruncana stuarti	1	73	67,3	Campanian	Maastrichtian					
				Globotruncana arca convexa	1	86,7	67,3	Santonian	Maastrichtian					
				Globotruncana gansseri	1	71	67,3	Maastrichtian	Maastrichtian					
				Globotruncana calciformis	1	79,2	67,3	Campanian	Maastrichtian					
43	RM86	Road towards Palmes	Biomicrites with chert nodules	Globotruncana arca convexa	1	86,7	67,3	Santonian	Maastrichtian	73	67,3	Campanian	Maastrichtian	Macaya Formation
				Globotruncana stuarti	1	73	67,3	Campanian	Maastrichtian					
				Globotruncana elevata	1	84,2	67,3?	Campanian	Maastrichtian?					
				Globotruncana stephensoni	1	83,6	67,3	Campanian	Maastrichtian					
44	RM86	8km west of road towards Palmes	Biomicrites with chert nodules	Globotruncana stephensoni	1	83,6	67,3	Campanian	Maastrichtian	73	71,8	Campanian	Maastrichtian	Macaya Formation
				Globotruncana stuartiformis	1	86,7	67,3	Santonian	Maastrichtian					
				Globotruncana arca convexa	1	86,7	67,3	Santonian	Maastrichtian					
				Globotruncana lapparenti	1	86,7	67,3?	Santonian	Maastrichtian?					
				Globotruncana conica	1	73	71,8	Campanian	Maastrichtian					
45A	RM86	Morne Madame Toussaint	Marlstone	Watznaueria bernesea	2	168,2	66	Bathonian	Maastrichtian	89,8	66	Coniacian	Maastrichtian	Sequence; top of calcarenites overlying silts in turn overlying marls in turn overlying volcanoclastic breccia in turn unconformably overlying CLIP basalts
Micula staurophora				2	89,8	66	Coniacian	Maastrichtian						
Globigerina triloculoides				1	P1b	P4	Danian	Thanetian	65,2					
45B	RM86	Bas-de-la-Croix	Biomicrites (silty?)	Subbotina pseudobulloides	1	Pa	P3	Danian	Selandian	66	60,7	Danian	Selandian	(Silty?) biomicrites in faulted contact with CLIP basalts
45C				Globigerina triloculoides	1	P1b	P4	Danian	Thanetian					
46	RM86	Bas-de-la-Croix	Biomicrites (silty?)	Globotruncana stuarti	1	73	67,3	Campanian	Maastrichtian	57,7	57	Thanetian	Thanetian	Om-bedded calcareous siltstones (?)
				Globotruncana arca convexa	1	86,7	67,3	Santonian	Maastrichtian					
				Globotruncana lapparenti	1	86,7	67,3?	Santonian	Maastrichtian?					
47	RM86	Rivière Bois d'Orme	Calcareous siltstones (?)	Globorotalia velascoensis	1	P3b	E2	Selandian	Ypresian	57,7	57	Thanetian	Thanetian	Om-bedded calcareous siltstones (?)
				Globorotalia aequa	1	P4c	E5	Thanetian	Ypresian					
				Globorotalia aequa	1	P4c	E5	Thanetian	Ypresian					
48	RM86	Rivière Mombun	Calcareous siltstones (?)	Globorotalia aequa	1	P4c	E5	Thanetian	Ypresian	61,3	55	Selandian	Ypresian	Calcareous siltstones
				Globorotalia velascoensis	1	P3b	E2	Selandian	Ypresian					