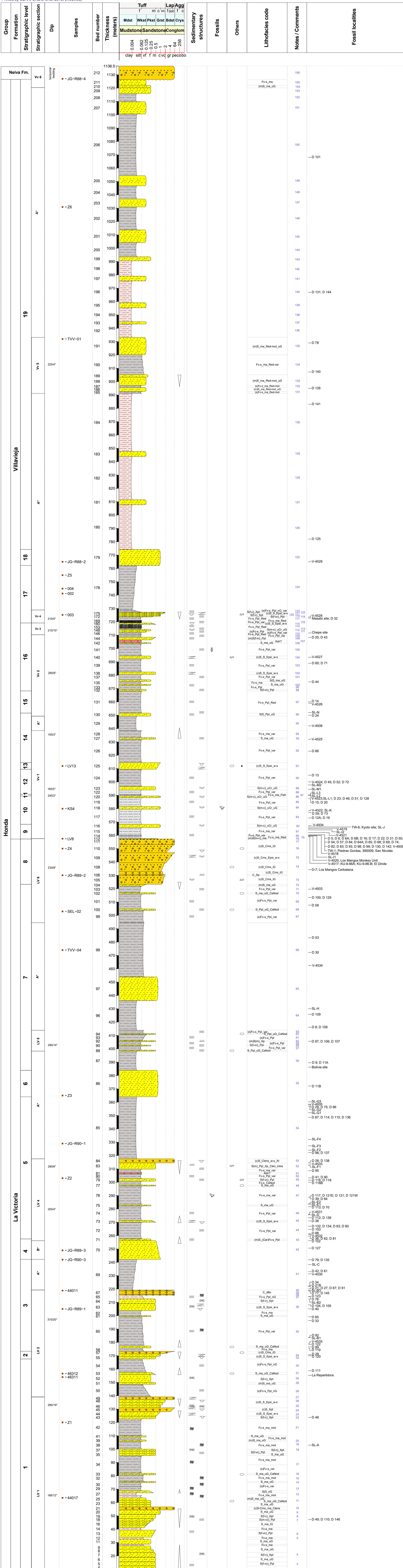


Detailed composite section Honda Group

Printed by SDAR, Ortiz J. et al. 2015, (modified)



Locality		LEGEND		Stratigraphic sections	
Name: La Tatacoa		Dominant lithology		<ul style="list-style-type: none"> This work: LV 1, LV 2, LV 4, LV 5, LV 6, Vv 1, Vv 2, Vv 3, Vv 4, Vv 5, Vv 6 Additional sections: A* and B* (Guerrero 1997) 	
Units: meters		<ul style="list-style-type: none"> planar lamination claystone mudstone siltstone sandstone conglomerate tuff 		Acronyms of fossil localities (prefix) V University of Antioquia - Fields (1959) D Duke University / Ingeominas localities - Guerrero (1997) KY Kyoto University, and "fossil" sites - Takai et al. (2001) SL Sampled level - Zurita et al. (2013)	
Scale: 1 : 1000		Sedimentary structures <ul style="list-style-type: none"> through cross bedding undulose current ripples molting epsilon stratification wedge-shaped structures 		Fossils <ul style="list-style-type: none"> mammals leaves 	
Location Latitude: 3.39307 (base) Longitude: -75.14735 (base) Elevation: 416 m Country: Colombia		Others <ul style="list-style-type: none"> coarsening-upward fining-upward calcareous nodules intraclasts ferruginous nodules 			

Note / Comment's number	Notes / Comments
1	Saldaña Formation tuffs
2	Unconformity contact
3	Muddy sandstone (mud fraction 30%) sub-litharenite with medium grain size, planar parallel lamination
4	Sub-litharenite with grain size fine to medium, discontinuous inclined parallel lamination.
5	Grey-brown micaceous mudstone
6	Muddy sandstone (mud fraction = 35%) Fine to medium grained sub-litharenite, with discontinuous planar-parallel lamination
7	Muddy sandstone (mud fraction = 35%). Fine to medium grained sub-litharenite, well selected
8	sub-litharenite with conglomerate lens (pebbles)
9	Conglomeratic lens
10	Lithic sandstones with grain size fine to medium, conglomeratic lens, well rounded clast (quartz and chert) up to pebble
11	Muddy sandstone. Litharenite with some calcareous nodules. Lenticular with lateral mottled muddy levels
12	Red and gray mottled mudstones, with some lenses of medium sand
13	Sandy mudstone, mottled gray to red
14	sub-litharenite fine to medium grain sized, with quartz
15	Mottled siltstone
16	Sandstone with fine to medium grain size and calcareous nodules
17	At ~81.5 m Sandy mudstone. At ~86.5 m mottled gray and red mudstone
18	Muddy sandstone with fine to medium grain size
19	Mottled mudstone, massive, gray and red
20	Gray muddy sandstone lenses
21	Thick packet of mottled gray-red mudstone
22	Medium-grained sandstone, lithic (20% quartz), friable,; with trough and continuous bedding. *At the top Wedge-shaped bedding
23	*Epsilon stratification
24	Conglomeratic lenses (clasts > 4 cm), angular; quartz, chert, volcanic rocks and gabbro; poorly sorted. * At the top Wedge-shaped bedding
25	Medium to coarse-grained sub-litharenite. Conglomeratic lenses; trough cross-bedding and planar cross-bedding tangential at the base. *At the base Wedge-shaped bedding, and at the top epsilon stratification
26	Medium to coarse-grained sub-litharenite, with conglomeratic lenses of quartz and chert. *Wedge-shaped bedding
27	*Epsilon stratification
28	Sandy mudstones with levels of fine sand (<10 cm) and mudstones (<20 cm). Discontinuous and continuous planar parallel stratification
29	Lithic muddy sandstone with fine to medium grain size, calcareous
30	Lithic muddy sandstone with fine grain size, gray color, cross-bedding tangential at the base
31	Calcareous muddy sandstone with lithics
32	Mottled sandy mudstone, with levels (<20 cm) of mottled mudstone
33	Medium-grained muddy sandstone with conglomeratic lenses. *Wedge-shaped bedding
34	Lithic sandstone, with medium to coarse-grained, calcareous nodules and conglomeratic levels. *Epsilon stratification
35	Mottled mudstone, with brown to red color, and levels of very fine-grained sandstone
36	Medium-grained lithic sandstone, friable, dark brown. *Wedge-shaped bedding (base) and epsilon stratification (top)
37	Gray mudstone, slightly mottled at the top, with planar lamination
38	Irregular bed
39	Very irregular bed. Polymictic matrix supported conglomerates, with angular clasts and granules (< 7cm) of quartz, tuff, lava, chert and other reworked conglomerates
40	Very irregular bed
41	**The description is taken from A section (Guerrero 1997)
42	**The description is taken from B section (Guerrero 1997)
43	Muddy sandstone, lithic, gray, with laminae of coaly mudstone
44	Mottled mudstone, varicolored gray-red-green
45	Lithic sandstone with fine to medium grain size, with quartz (> 25 %). *Wedge-shaped bedding(base) and epsilon stratification (top)
46	Mottled mudstone, varicolored yellow-green-red-gray-brown
47	Mottled mudstone, varicolored brown - purple - green. Toxodont teeth
48	Lens of medium-grained lithic sandstone, gray, well sorted and calcareous
49	Gray lithic sandstone with quartz, calcareous lithics and intraclasts
50	Mottled mudstone gray-brown-red, interbedded with volcanic ash (?)
51	Ash level(?)
52	Gray lithic sandstone, quartz (> 25%) with conglomeratic lenses of quartz, mud, chert and volcanics. Intraclasts of gray and green mud
53	*Wedge-shaped bedding
54	**The description is taken from A section (Guerrero 1997)
55	**The description is taken from A section (Guerrero 1997) for "Tatacoa Ss Beds"
56	**The description is taken from A section (Guerrero 1997)
57	Varicolored green-red-light yellow mudstone
58	Calcareous lithic sandstone (>25% quartz)
59	Sandy mudstone yellow-greenish
60	Lithic sandstone with green feldspathic matrix and thin beds of calcareous sandstone
61	Sandy mudstone yellow-greenish
62	Calcareous lithic sandstone, quartz (>25%) and presence of nodules
63	Mottled green-red-gray sandy mudstone
64	**The description is taken from A section (Guerrero 1997)
65	**The description is taken from A section (Guerrero 1997)
66	**The description is taken from A section (Guerrero 1997)
67	Mottled green-red-gray sandy mudstone
68	Lithic sandstone with calcareous nodules, quartz (>25%)
69	Mottled sandy mudstone
70	Calcareous lithic sandstone, with calcite veins and quartz (20 %)
71	Mottled yellow mudstone
72	Gray muddy sandstone
73	Wedge-shaped bedding. Lithic sandstone with medium to coarse grain size, lenses of polymictic conglomerate of quartz, chert and volcanics; some intraclasts
74	Wedge-shaped bedding. Cross-bedding indicated by the clasts disposition
75	Conglomeratic lithic sandstone, gray, with clasts up to granule of quartz, chert, volcanic and sedimentary rocks, moderately sorted and calcareous nodules levels. *Epsilon stratification. Cross-bedding indicated by the clasts disposition
76	At the base Wedge-shaped bedding. Cross-bedding indicated by the clasts disposition
77	Cross-bedding indicated by the clasts disposition
78	Muddy sub-litharenite (>25% quartz) with medium to coarse grain size
79	This lithology can change laterally to muddy sandstone (sub-litharenite >25% quartz) from medium grain to coarse gray
80	Level of very fossiliferous red mudstone (Top of Monkey Beds)
81	Varicolored mudstone gray-red-brown-green with levels of sandy mudstone
82	Gray sub-litharenite (30% quartz), well sorted
83	Varicolored mudstones gray-red-brown-green with levels of gray sandy mudstone
84	Gray sub-litharenite (<35% quartz) with calcareous cement and levels of iron oxide. Rodent teeth (Olenopsis sp.)
85	Varicolored mudstone brown-red-green
86	Litharenite with calcareous cement, quartz > 30%
87	Fossiliferous level of green mudstone (Fish Bed)
88	Mottled mudstone brown-red-green
89	Litharenite with calcareous nodules
90	Mottled mudstone green-red-brown-gray
91	Ferruginous beds - Brown litharenite with levels of lenticular polymictic conglomerates of quartz, chert and volcanic rock clasts; some ferruginous and calcareous nodules- *Epsilon stratification (at the base) and Wedge-shaped bedding. Cross-bedding indicated by the clasts disposition
92	Mottled varicolored mudstone
93	sub-litharenite slightly calcareous
94	Mottled varicolored mudstone
95	**The description is taken from A section (Guerrero 1997), just below Duke locality 24
96	sub-litharenite with planar parallel lamination, dark gray color
97	Red-yellow mudstones with abundant fossils
98	Gray litharenite, quartz >25%
99	Dark gray mudstone
100	Gray litharenite, quartz (20%) slightly calcareous
101	Levels of varicolored mudstone green-red-brown
102	Litharenite, sub-litharenite with cross bedding tangential to the base. *Epsilon stratification
103	Varicolored mudstone yellow-green-dark brown
104	Gray sub-litharenite with muddy intraclasts. *Epsilon stratification
105	Varicolored mudstones red-brown oxidized and some carbonized plant remains, some leaves are complete. To the top, oxidized mottled mudstones gray and light yellow
106	Wedge-shaped bedding
107	Green ash level? with fractures filled with gray sand
108	Slightly muddy sub-litharenite, gray and very well sorted
109	Varicolored mudstones brown-light green and a level of green claystone
110	Red mudstones
111	Brown and red sandy mudstone
112	Gray sub-litharenite, lenticular-shaped, slightly calcareous
113	Varicolored mudstone gray and red
114	Red-yellow mudstone with some with cores
115	Yellow reddish litharenite, friable, with variable thickness laterally. *Wedge-shaped bedding
116	Mottled red and green mudstones with levels of sandy mudstone
117	Mottled red-yellow mudstone (at the base). Mottled red claystone (at the top)
118	Slightly calcareous sub-litharenite with planar parallel lamination
119	Cross-bedding indicated by the clasts disposition
120	sub-litharenite with conglomeratic lenses and Wedge-shaped beddings; floating clasts of intrusive rocks, chert, milky quartz, metamorphic and sedimentary rocks. Presence of lenticular calcareous nodules and green intraclasts. *Wedge-shaped bedding and cross-bedding indicated by the clasts disposition
121	*Epsilon stratification and tabular cross-bedding tangential at the base
122	Cross-bedding indicated by the clasts disposition
123	Light green sandy mudstone (at the base) and mottled red mudstone (at the top)
124	**The description is taken from A section (Guerrero 1997)
125	** San Francisco Sandstone Beds (Guerrero 1997). The description is taken from A section (Guerrero 1997)
126	**The description is taken from A section (Guerrero 1997)
127	**The description is taken from A section (Guerrero 1997)
128	**The description is taken from A section (Guerrero 1997)
129	**The description is taken from A section (Guerrero 1997)
130	**The description is taken from A section (Guerrero 1997)
131	Sandy mudstone
132	Sandy mudstone
133	Inter-bedding of sub-tabular thick to very thick muddy sandstone beds, red with mottled to white and light yellow, very well sorted, with iron oxide cement; interbedded with massive sandy mudstone, mottled with red and white colors
134	At the base: Massive mottled red muddy sandstone (40% quartz, 60% lithics), slightly friable and mottled to white. At the middle portion mottled red and with the massive mudstone
135	Thick to very thick sub-tabular massive sandstone, mottled to yellow and white, very well sorted and micaceous
136	**The description is taken from A section (Guerrero 1997)
137	**The description is taken from A section (Guerrero 1997)
138	**The description is taken from A section (Guerrero 1997)
139	**The description is taken from A section (Guerrero 1997)
140	**The description is taken from A section (Guerrero 1997)
141	**The description is taken from A section (Guerrero 1997)
142	**The description is taken from A section (Guerrero 1997)
143	**The description is taken from A section (Guerrero 1997)
144	**The description is taken from A section (Guerrero 1997)
145	**The description is taken from A section (Guerrero 1997)
146	**The description is taken from A section (Guerrero 1997)
147	**The description is taken from A section (Guerrero 1997)
148	**The description is taken from A section (Guerrero 1997)
149	**The description is taken from A section (Guerrero 1997)
150	**The description is taken from A section (Guerrero 1997)
151	**The description is taken from A section (Guerrero 1997)
152	**The description is taken from A section (Guerrero 1997)
153	**The description is taken from A section (Guerrero 1997)
154	Gray litharenite (50% lithics, 50% quartz), friable, micaceous
155	Gray muddy sandstone, lithic (35% lithics, 65% quartz), 35% of mud, micaceous
156	Neiva Fm. Sub-tabular beds of non-consolidated conglomerates, clast-supported. Sedimentary rock clasts >> Igneous phaneritic texture