



REVISTA DE LA ACADEMIA
COLOMBIANA DE CIENCIAS
EXACTAS, FÍSICAS Y NATURALES

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Supplementary Information

Fossil leaves, woods, gastropods, and a crocodile tooth: Is the Amagá Formation worth exploring?

Fósiles de hojas, maderas, gasterópodos y un diente de cocodrilo, ¿vale la pena explorar la Formación Amagá?

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Contents

Appendix 1. Sedimentary logs of the fossil localities: Sinifana, Cinco-Venecia, Palomos, La Naranjala, Sabaleticas, Sabaletas, and Palmichala.

1a. Fossil locality Sinifana. The sedimentary log and its fossil beds are taken from Silva-Tamayo et al. (2008).

1b. Fossil locality Cinco-Venecia: The sedimentary log and its fossil beds are taken from Silva-Tamayo et al. (2008).

1c. Fossil locality Palomos: The sedimentary log and its fossil beds are taken from Silva-Tamayo et al. (2008).

1d. Fossil locality La Naranjala: The sedimentary log and its fossil beds are taken from Henao (2012).

1e. Fossil locality Sabaleticas: The sedimentary log and its fossil beds are taken from Páez-Acuña (2013).

1f. Fossil locality Sabaletas: The sedimentary log and its fossil beds are taken from Páez-Acuña (2013).

1g. Fossil locality Palmichala: The sedimentary log and its fossil beds are taken from Páez-Acuña (2013).

References

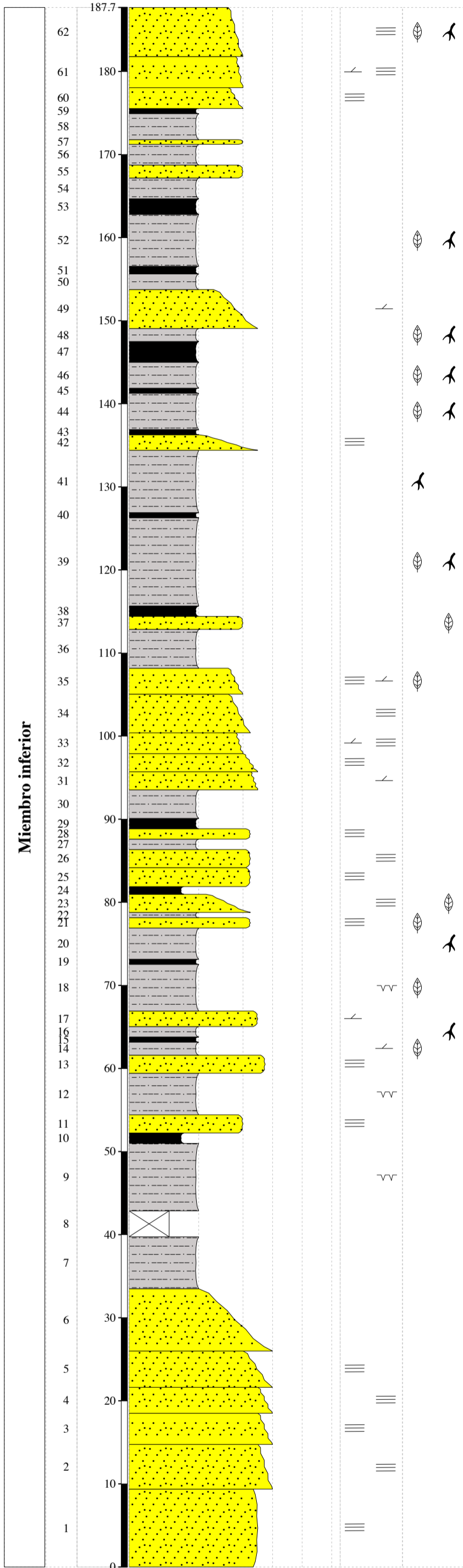
Henao, J. E. (2012). Estratigrafía y Petrografía de las Areniscas de la Secuencia Quebrada La Naranjala – Municipio de Fredonia Miembro Inferior de la Formación Amagá. Undergraduate Thesis. Universidad EAFIT. 61 pp.

Páez -Acuña, L. A. (2013). Análisis Estratigráfico y de Proveniencia del Miembro Superior de la Formación Amagá en los Sectores de La Pintada y Valparaíso (Cuenca Amagá, Andes Noroccidentales). Undergraduate Thesis. Universidad EAFIT. 165 pp.

Silva-Tamayo, J. C., Sierra, G. M., & Correa, L. G. (2008). Tectonic and climate driven fluctuations in the stratigraphic base level of a Cenozoic continental coal basin, northwestern Andes. *Journal of South American Earth Sciences*, 26(4), 369-382.

1a

Litho	Bed number	Thickness (meters)	Tuff					Lap	Agg	Sedimentary structures	Fossils		
			f	m	c	vc	fmc	f	c				
Member			Mdst	Wkst	Pkst	Grst	Bdst	Crys					
			Mudstone			Sandstone		Conglom					
			0.004	0.062	0.125	0.25	0.5	1	2	4	64	256	
			clay	silt	vf	f	m	c	vc	gr	pe	co	bo



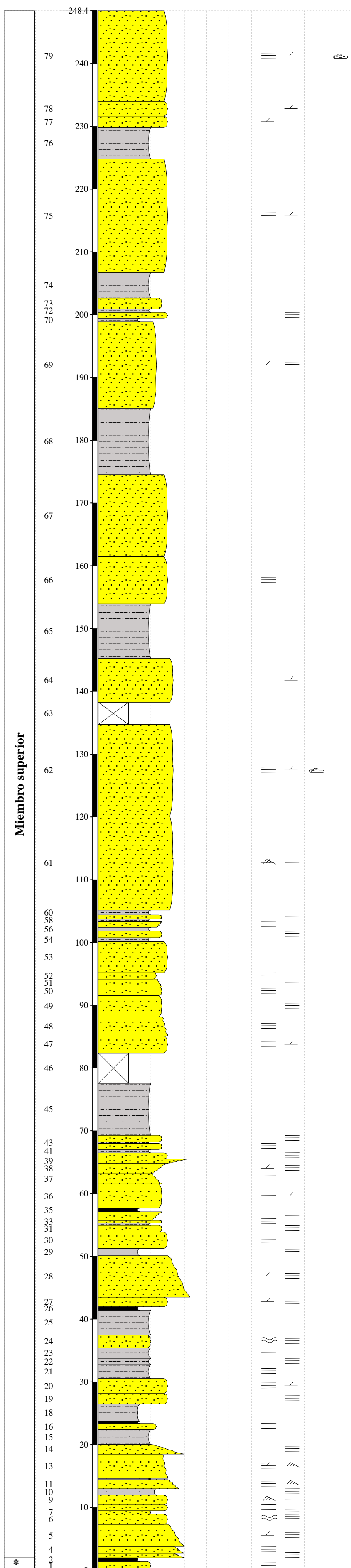
Locality
Name: Sección Sinifana
ID:
Units:
Scale: 1 : 500

Location
Latitude:
Longitude:
Elevation:
Country: Colombia

LEGEND		
Dominant lithology	Sedimentary structures	Fossils
mudstone	planar lamination	leaves
sandstone	cross bedding	roots
coal	mudcracks	
covered		

1b

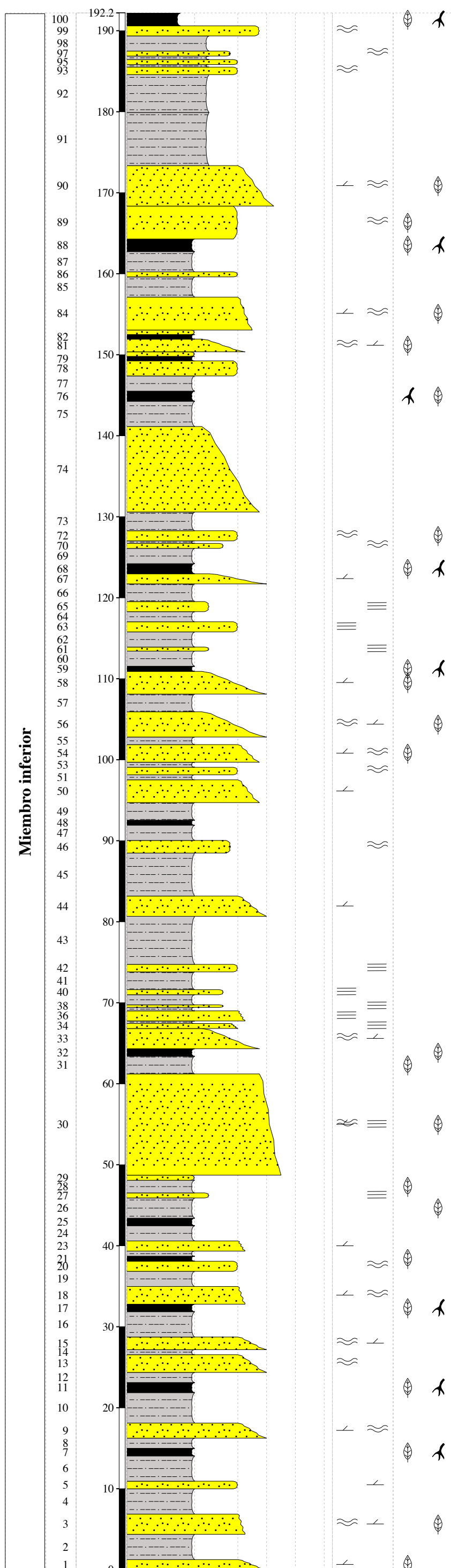
Litho	Member	Bed number	Thickness (meters)	Tuff						Lap	Agg	Sedimentary structures	Fossils	
				f ⁺	m	c	ve	f _m c	f _c					
				Mdst	Wkst	Pkst	Grst	Bdst	Crys					
				Mudstone		Sandstone		Conglom						
				0.004	0.062	0.125	0.25	0.5	1	2	4	64	256	
				clay	silt	vf	f	m	c	vc	gr	pe	co	bo



Locality Name: Cinco-Venecia ID: Units: Scale: 1 : 500	LEGEND		
	Dominant lithology mudstone sandstone coal covered	Sedimentary structures planar lamination cross bedding ripple lamination wavy lamination	Fossils wood

Location	
Latitude:	
Longitude:	
Elevation:	
Country:	Colombia

Litho	Bed number	Thickness (meters)	Tuff						Lap	Agg	Sedimentary structures	Fossils				
			f	m	c	vc	fmc	f	c							
Member			Mdst	Wkst	Pkst	Grst	Bdst	Crys								
			Mudstone		Sandstone			Conglom								
			0.004	0.062	0.125	0.25	0.5	1	2	4	64	256				
			clay	silt	vf	f	m	c	vc	gr	pe	co	bo			

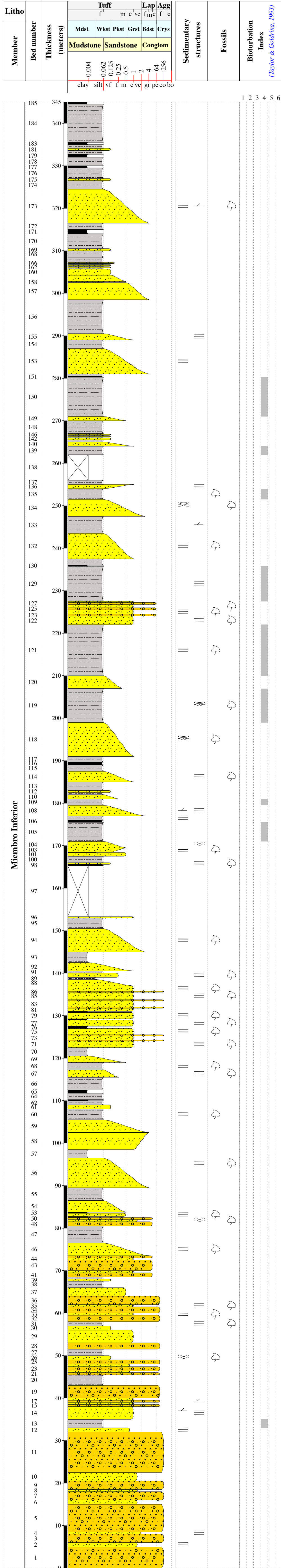


Locality
 Name: Sección Mina Palomos
 ID:
 Units:
 Scale: 1 : 500

Location
 Latitude:
 Longitude:
 Elevation:
 Country: Colombia

LEGEND		
Dominant lithology	Sedimentary structures	Fossils
mudstone	planar lamination	leaves
sandstone	cross bedding	roots
coal	wavy lamination	

1d

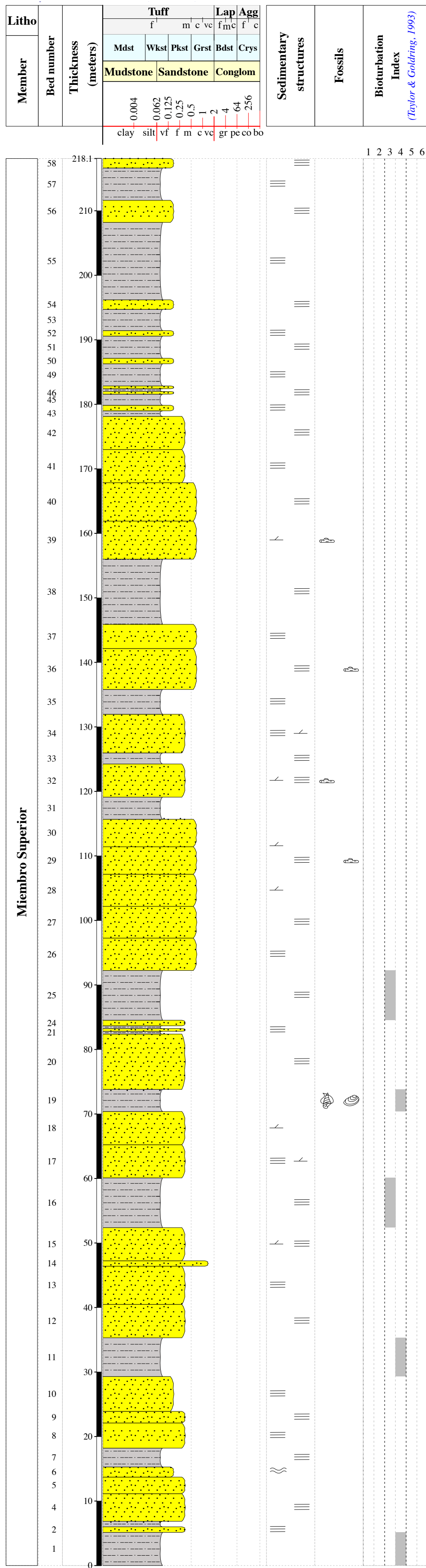


Locality
Name: La Naranjala
ID:
Units:
Scale: 1 : 500

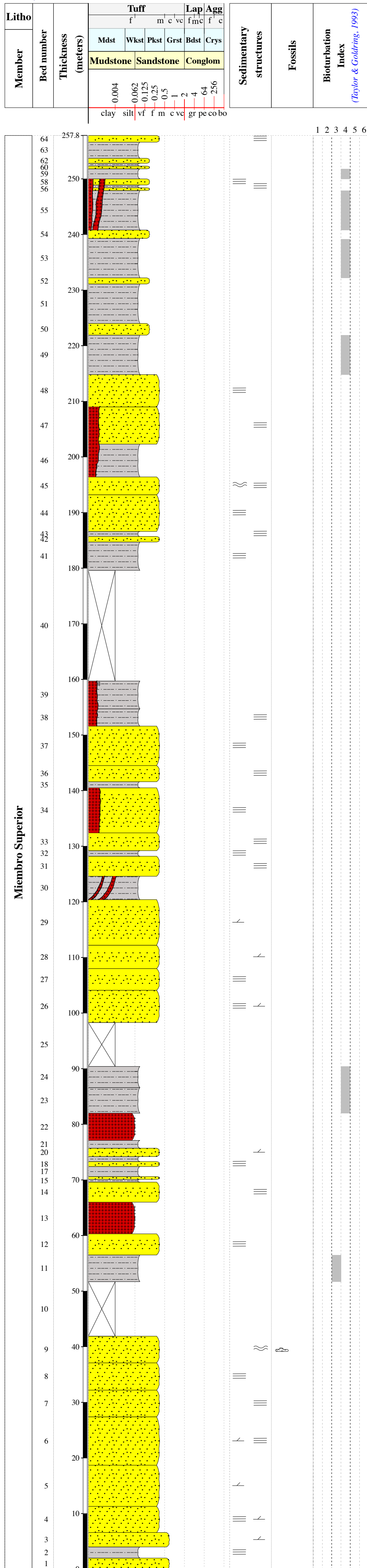
Location
Latitude:
Longitude:
Elevation:
Country: Colombia

LEGEND			
Dominant lithology	Bioturbation Index <i>(Taylor & Goldring, 1983)</i>	Sedimentary structures	Fossils
<ul style="list-style-type: none"> mudstone sandstone conglomerate coal covered 	<ul style="list-style-type: none"> 1 - Sparse 2 - Low 3 - Moderate 4 - High 5 - Intense 6 - Complete 	<ul style="list-style-type: none"> planar lamination cross bedding cross cross bedding wavy lamination 	<ul style="list-style-type: none"> plants

1e

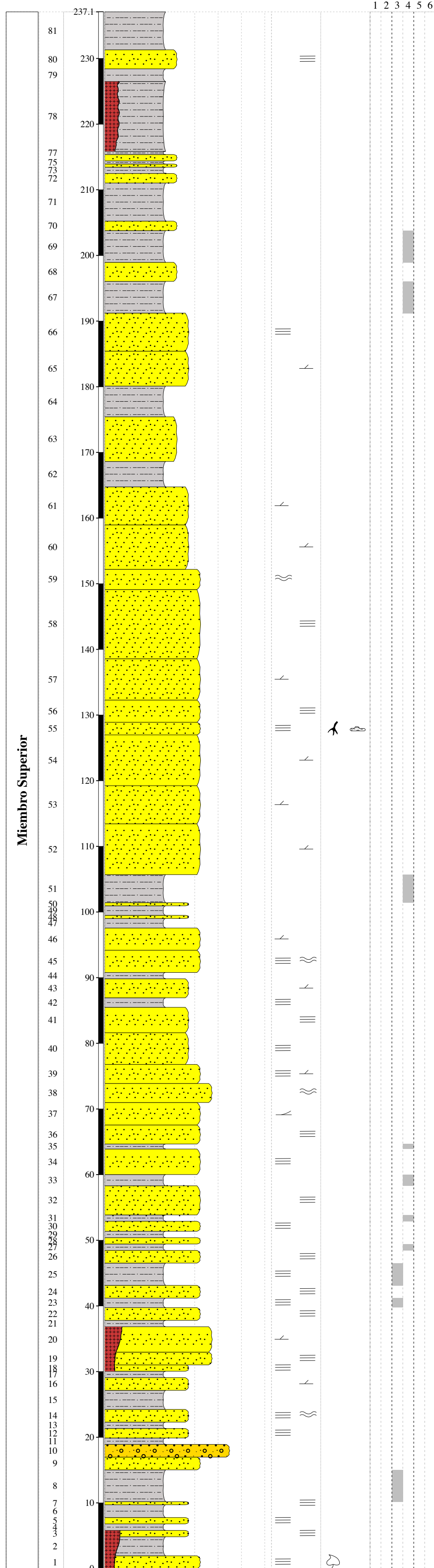


<p>Locality Name: Quebrada Sabaletica ID: Units: Scale: 1 : 500</p> <p>Location Latitude: Longitude: Elevation: Country: Colombia</p>	<p>Dominant lithology</p> <p>☐ mudstone</p> <p>☐ sandstone</p>	<p>LEGEND</p> <p>Bioturbation Index <i>(Taylor & Goldring, 1983)</i></p> <p>1 – Sparse 4 – High 2 – Low 5 – Intense 3 – Moderate 6 – Complete</p>	<p>Sedimentary structures</p> <p>≡ planar lamination / cross bedding ≈ wavy lamination</p>	<p>Fossils</p> <p>☉ gastropods ☉ bivalves ☉ plants ☉ wood</p>
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<p>Locality Name: Quebrada Sabaleta ID: Units: Scale: 1 : 500</p> <p>Location Latitude: Longitude: Elevation: Country: Colombia</p>	<p>LEGEND</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <p>Dominant lithology</p> <ul style="list-style-type: none"> mudstone sandstone andesite porphyry covered </td> <td style="width: 33%; vertical-align: top;"> <p>Bioturbation Index <i>(Taylor & Goldring, 1983)</i></p> <table style="width: 100%; border: none;"> <tr> <td>1 – Sparse</td> <td>4 – High</td> </tr> <tr> <td>2 – Low</td> <td>5 – Intense</td> </tr> <tr> <td>3 – Moderate</td> <td>6 – Complete</td> </tr> </table> </td> <td style="width: 33%; vertical-align: top;"> <p>Sedimentary structures</p> <ul style="list-style-type: none"> planar lamination cross bedding wavy lamination <p>Fossils</p> <ul style="list-style-type: none"> wood </td> </tr> </table>	<p>Dominant lithology</p> <ul style="list-style-type: none"> mudstone sandstone andesite porphyry covered 	<p>Bioturbation Index <i>(Taylor & Goldring, 1983)</i></p> <table style="width: 100%; border: none;"> <tr> <td>1 – Sparse</td> <td>4 – High</td> </tr> <tr> <td>2 – Low</td> <td>5 – Intense</td> </tr> <tr> <td>3 – Moderate</td> <td>6 – Complete</td> </tr> </table>	1 – Sparse	4 – High	2 – Low	5 – Intense	3 – Moderate	6 – Complete	<p>Sedimentary structures</p> <ul style="list-style-type: none"> planar lamination cross bedding wavy lamination <p>Fossils</p> <ul style="list-style-type: none"> wood
<p>Dominant lithology</p> <ul style="list-style-type: none"> mudstone sandstone andesite porphyry covered 	<p>Bioturbation Index <i>(Taylor & Goldring, 1983)</i></p> <table style="width: 100%; border: none;"> <tr> <td>1 – Sparse</td> <td>4 – High</td> </tr> <tr> <td>2 – Low</td> <td>5 – Intense</td> </tr> <tr> <td>3 – Moderate</td> <td>6 – Complete</td> </tr> </table>	1 – Sparse	4 – High	2 – Low	5 – Intense	3 – Moderate	6 – Complete	<p>Sedimentary structures</p> <ul style="list-style-type: none"> planar lamination cross bedding wavy lamination <p>Fossils</p> <ul style="list-style-type: none"> wood 		
1 – Sparse	4 – High									
2 – Low	5 – Intense									
3 – Moderate	6 – Complete									

Litho	Member	Bed number	Thickness (meters)	Tuff					Lap	Agg
				f ¹	m	c	vc	f ^m	f ^c	
				Mdst	Wkst	Pkst	Grst	Bdst	Crys	
				Mudstone		Sandstone		Conglom		
				0.004	0.062	0.125	0.25	1	2	
				clay	silt	vf	f	m	c	
								gr	pe	
								co	bo	



Locality
 Name: Quebrada Palmichala
 ID:
 Units:
 Scale: 1 : 500

Location
 Latitude:
 Longitude:
 Elevation:
 Country: Colombia

LEGEND		Fossils	
	mudstone		plants
	sandstone		roots
	conglomerate		wood
	andesite porphyry		
Bioturbation Index <i>(Taylor & Goldring, 1983)</i>			
1 - Sparse	4 - High		
2 - Low	5 - Intense		
3 - Moderate	6 - Complete		
Sedimentary structures			
	planar lamination		
	cross bedding		
	festoon cross bedding		
	wavy lamination		