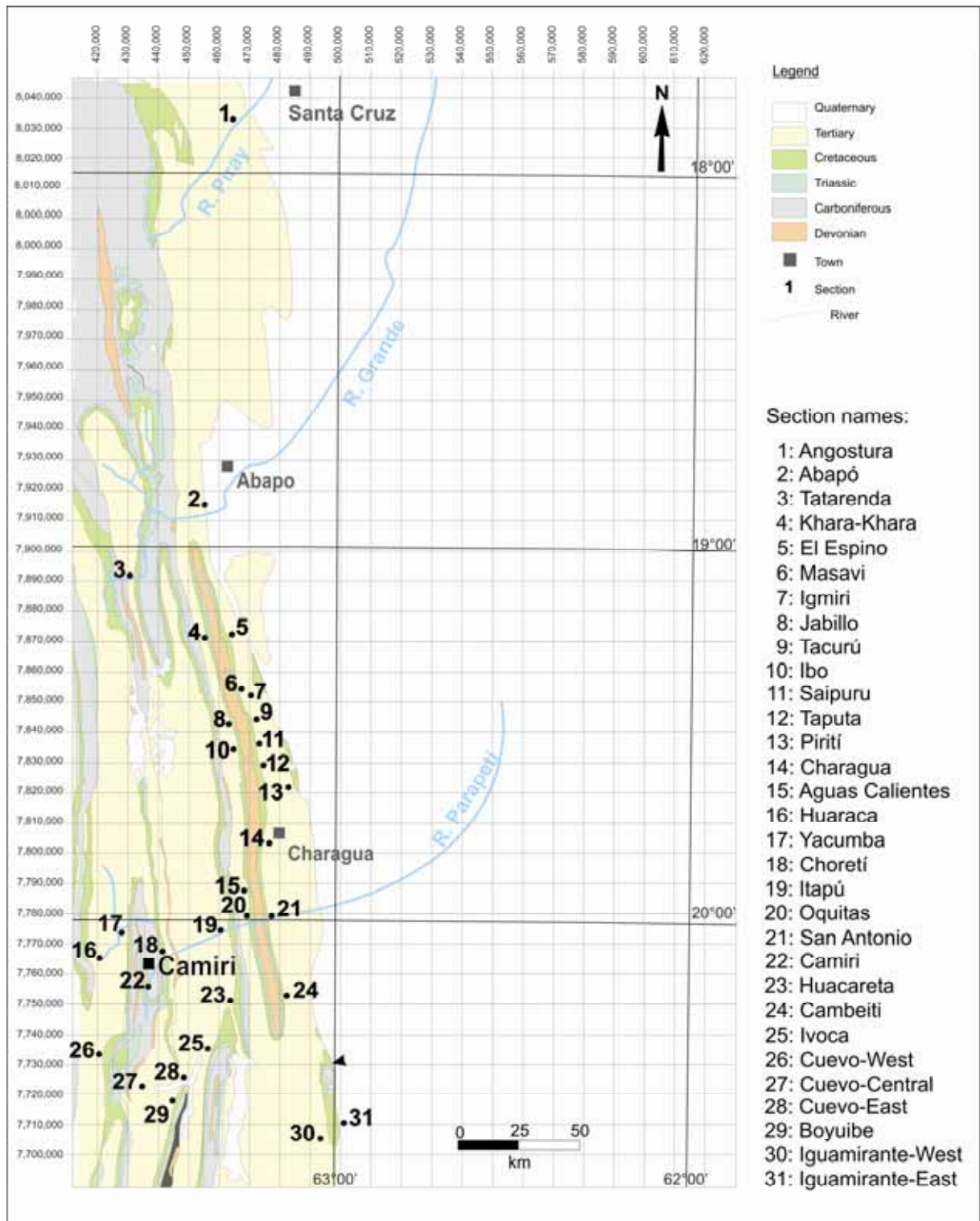


# Appendix

## Appendix A: Measured sections of the northern Chaco basin

(all details are given in UTM-coordinates (W/S))



**Section 1: Angostura**

Base: 0.455.136 / 7.991.158

Top: 0.455.692 / 7.991.466

Formations: Petaca, Yecua

**Section 2: Abapó**

Base: 0.455.369 / 7.907.089

Top: 0.451.303 / 7.907.966

Formations: Petaca, Yecua, Tariquia, Guandacay, Emborozú

**Section 3: Tatarenda**

Base: 0.440.734 / 7.889.402

Top: 0.439.852 / 7.889.483

Formations: Petaca, Yecua, Tariquia, Guandacay

**Section 4: Khara-Khara**

Base = Top: 0.460.274 / 7.871.409

Formations: Yecua

**Section 5: El Espino**

Base = Top: 0.470.195 / 7.871.412

Formations: no outcrop

**Section 6: Masavi**

Base: 0.469.207 / 7.856.793

Top: 0.470.718 / 7.858.373

Formations: Petaca, Tariquia

**Section 7: Igmiri**

Base: 0470016 / 7854433

Top: 0470121 / 7854416

Formations: Petaca, Yecua

**Section 8: Jabillo**

Base: 0.466.749 / 7.849.000

Top: 0.465.919 / 7.849.367

Formations: Petaca, Yecua, Tariquia

**Section 9: Tacurú**

Base = Top: 0.471.832 / 7.849.570

Formations: Petaca

**Section 10: Ibo**

Base: 0.469.323 / 7.840.683

Top: 0.465.773 / 7.845.574

Formations: Petaca, Tariquia

**Section 11: Saipuru**

Base: 0474757 / 7841799

Top: 0475872 / 7841516

Formations: Yecua, Tariquia

Section 12: Taputa  
Base: 0.476.035 / 7.834.131  
Top: 0.477.217 / 7.831.459  
Formations: Yecua, Tariquia

Section 13: Pirití  
Base: 0.486.872 / 7.821.527  
Top: 0.484.337 / 7.822.468  
Formations: Petaca, Yecua, Tariquia

Section 14: Charagua  
Base: 0.477.217 / 7.811.796  
Top: 0.480.785 / 7.812.028  
Formations: Petaca, Yecua, Tariquia

Section 15: Aguas Calientes  
Base: 0.470.439 / 7.795.773  
Top: 0.472.471 / 7.812.830  
Formations: Tariquia, Guandacay

Section 16: Huaraca  
Base: 0.428.705 / 7.773.147  
Top: 0.428.668 / 7.774.717  
Formations: Tariquia

Section 17: Yacumba  
Base: 0.436.032 / 7.784.464  
Top: 0.434.483 / 7.783.947  
Formations: Tariquia

Section 18: Choretí  
Base: 0.445.660 / 7.786.607  
Top: 0.445.576 / 7.786.115  
Formations: Petaca, Yecua, Tariquia

Section 19: Itapú  
Base: 0.467.678 / 7.784.758  
Top: 0.447.711 / 7.780.461  
Formations: Petaca, Yecua, Tariquia

Section 20: Oquitas  
Base: 0.473.531 / 7.785.886  
Top: 0486871 / 7786366  
Formations: Petaca, Yecua, Tariquia

Section 21: San Antonio  
Base: 0.478.896 / 7.786.397  
Top: 0.479.172 / 7.786.180  
Formations: Petaca, Yecua

**Section 22: Camiri**

Base: 0.444.325 / 7.782.676

Top: 0.446.776 / 7.781.456

Formations: Petaca, Tariquia

**Section 23: Huacareta**

Base: 0471152 / 7767117

Top: 0470994 / 7766865

Formations: Petaca, Tariquia

**Section 24: Cambeiti**

Base: 0.482.677 / 7.768.633

Top: 0.483.000 / 7.776.880

Formations: Petaca, Yecua

**Section 25: Ivoca**

Base: 0.465.838 / 7.757.092

Top: 0.462.542 / 7.759.937

Formations: Petaca, Tariquia

**Section 26: Cuevo-West**

Base: 0.431.328 / 7.749.925

Top: 0.431.249 / 7.749.956

Formations: Petaca, Yecua

**Section 27: Cuevo-Central**

Base: 0.449.930 / 7.737.921

Top: 0.442.574 / 7.738.475

Formations: Petaca, Tariquia

**Section 28: Cuevo-East**

Base: 0.462.739 / 7.749.354

Top: 0.462.976 / 7.749.495

Formations: Petaca, Yecua

**Section 29: Boyuibe**

Base: 0.460.514 / 7.744.580

Top: 0.459.702 / 7.744.392

Formations: Tariquia

**Section 30: Iguamirante-West**

Base: 0.498.760 / 7.722.890

Top: 0.492.311 / 7.726.211

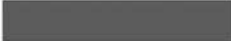
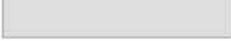

















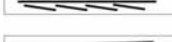




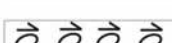

Formations: Petaca, Yecua, Tariquia

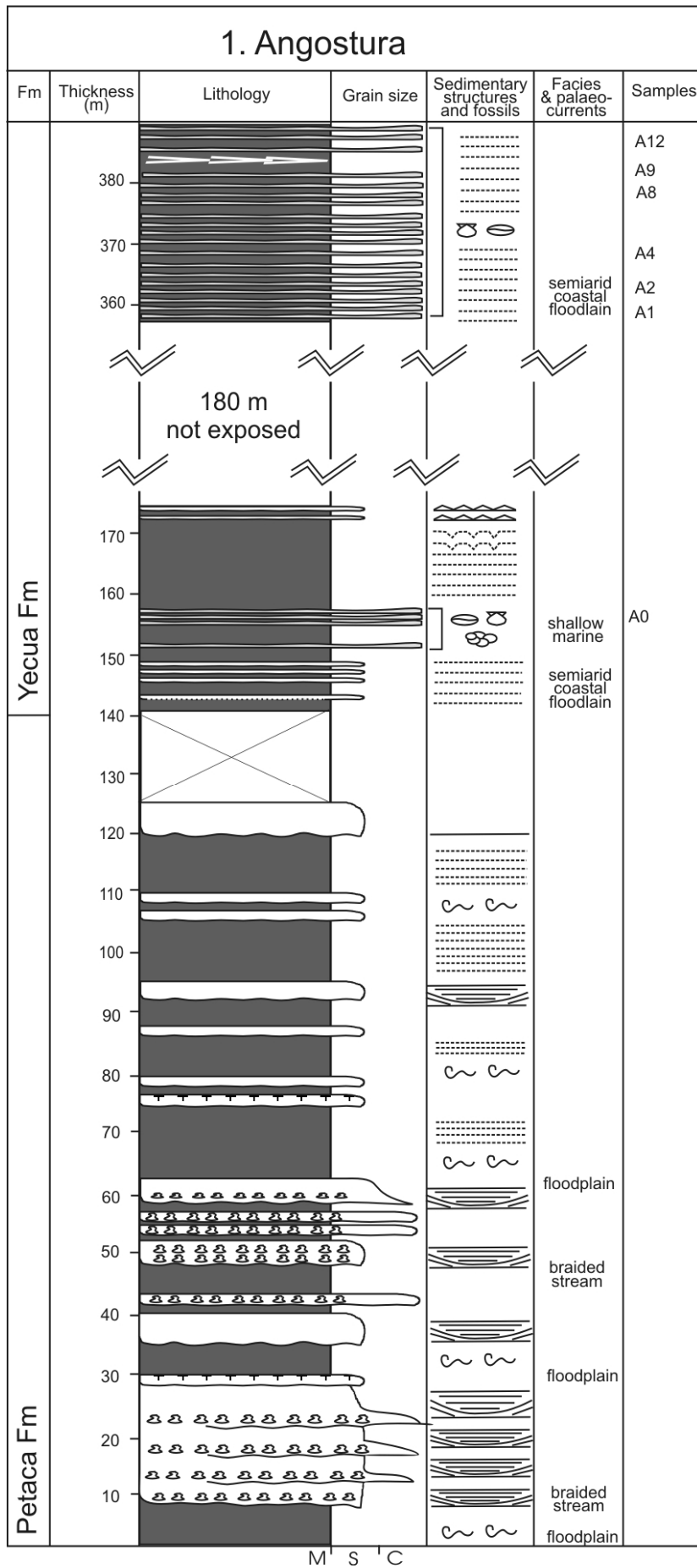
**Section 31: Iguamirante-East**

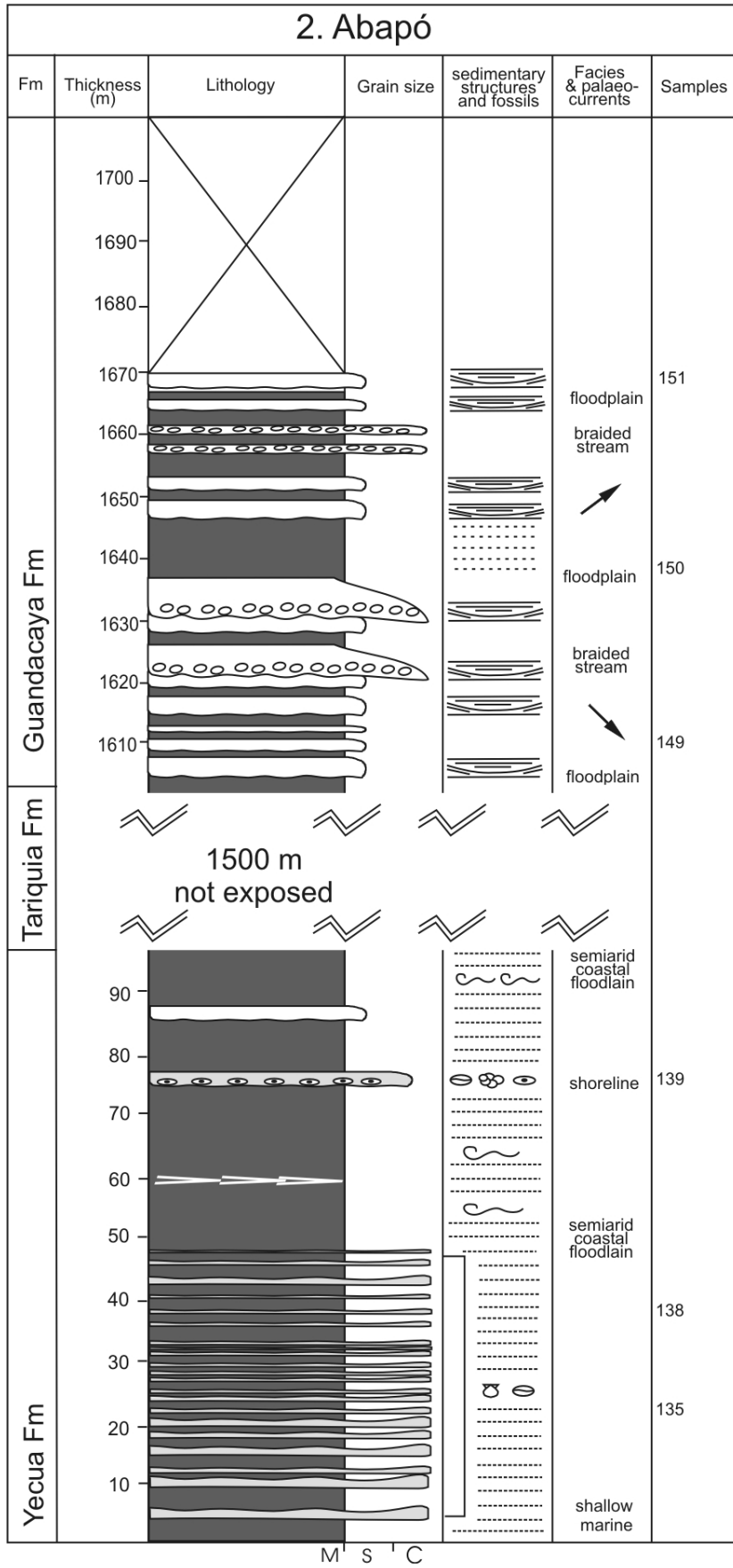
Base: 0.498.849 / 7.723.749

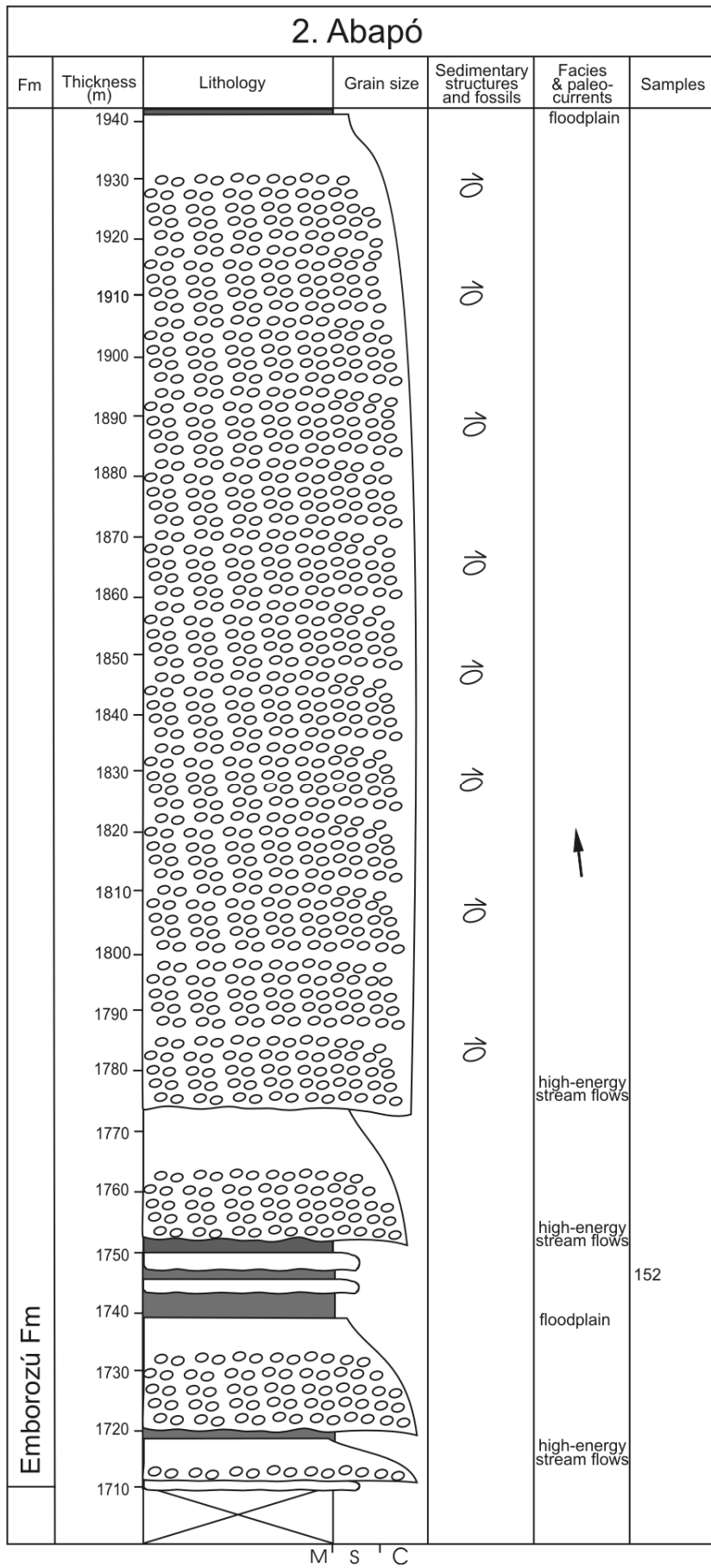
Top: 0.499.001 / 7.723.974

Formations: Petaca, Yecua, Tariquia

<u>Legend</u>	
Mudstone	
Shell hash	
Sandstone	
Secondary gypsum	
Soil	
Gravel	
Soil-clasts	
No exposure	
Bioturbation	
Plants	
Ooids	
Bivalves	
Ostracodes	
Foraminifera	
Parallel lamination	
Mudcracks	
Lenticular bedding	
Wavy bedding	
Flaser bedding	
Herring-bone cross-bedding	
Low angle cross-bedding	
Planar cross-bedding	
Trough cross-bedding	
Ripples	
Small-scale ripples	
Imbrication	
<p>Mud = M    Sand = S    Conglomerate = C</p>	

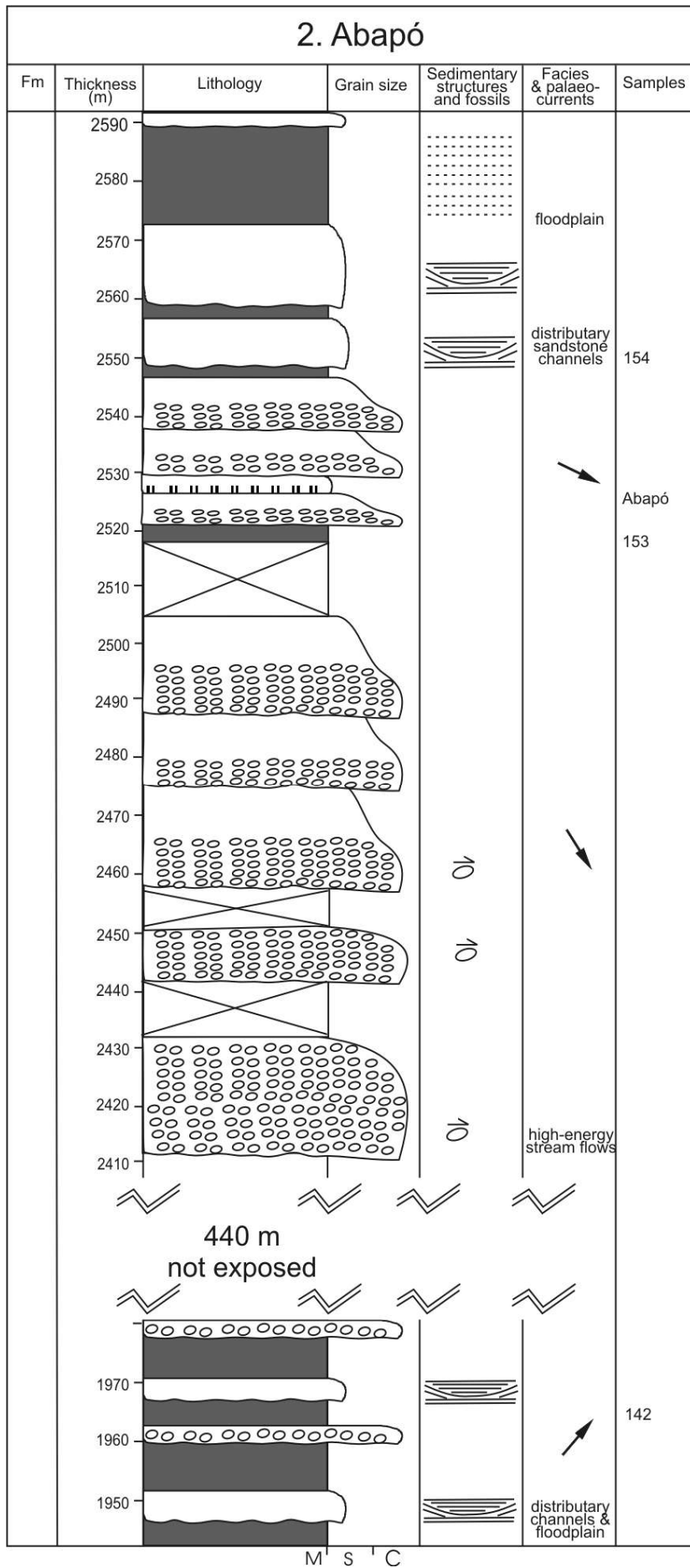


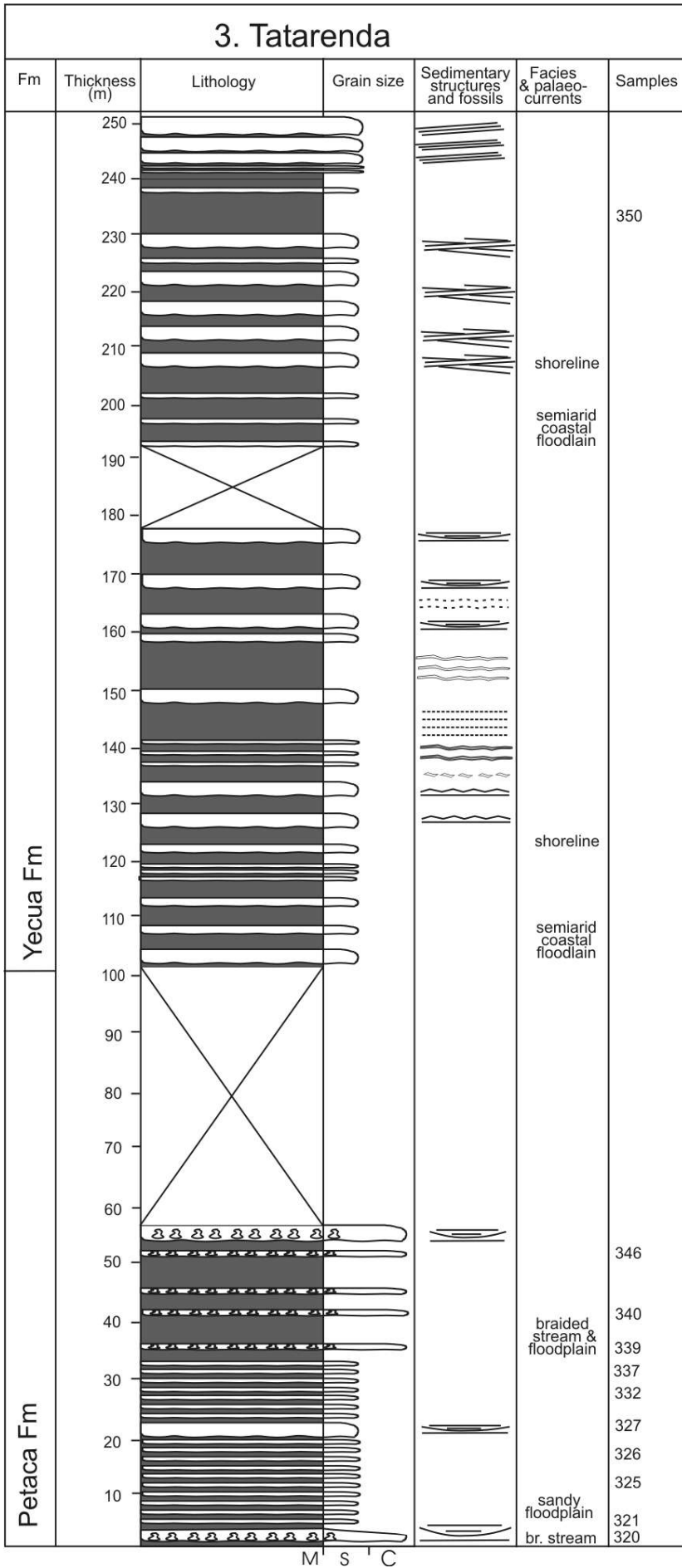


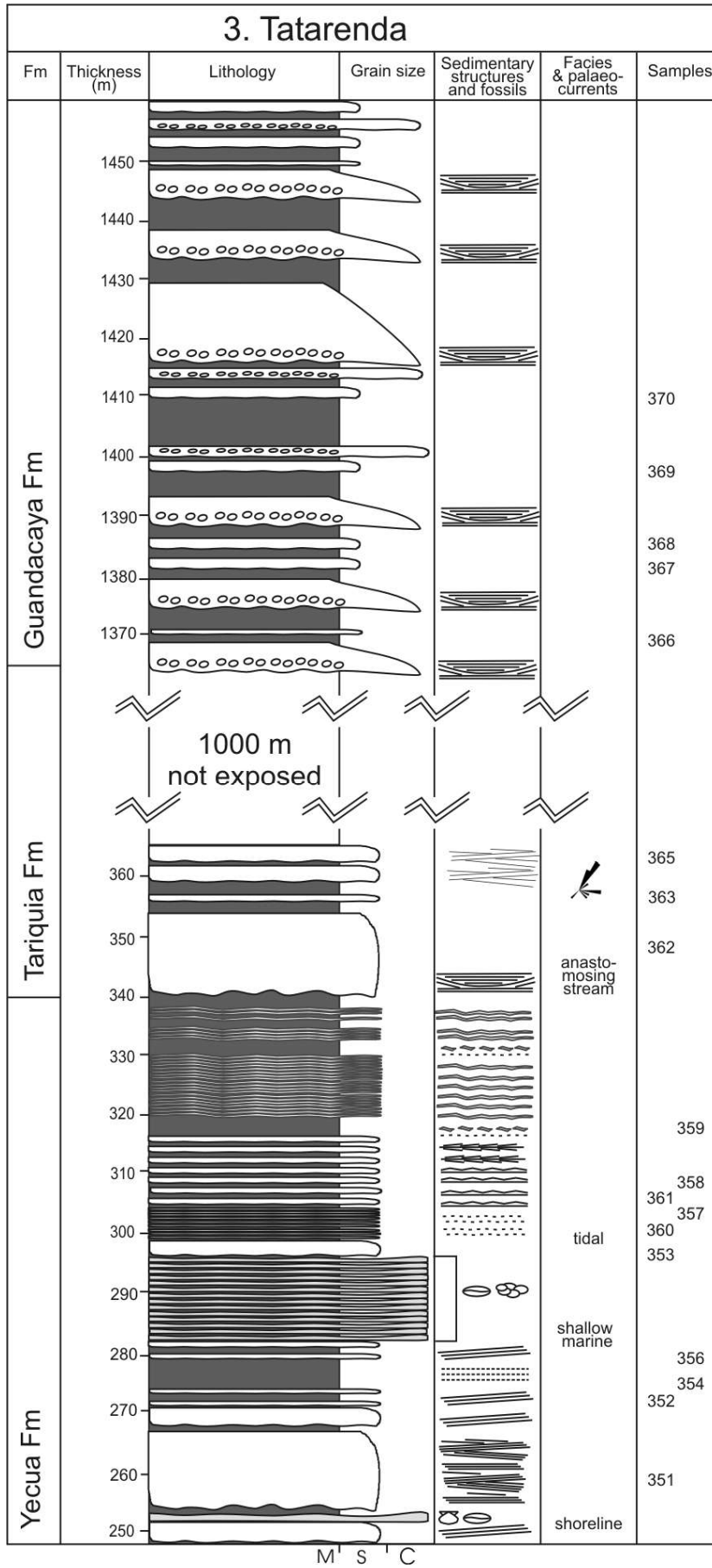


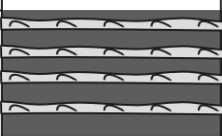

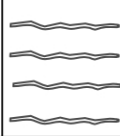
152



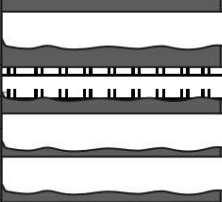
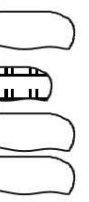
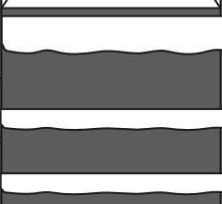

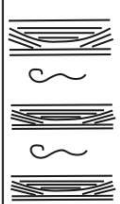

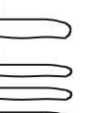





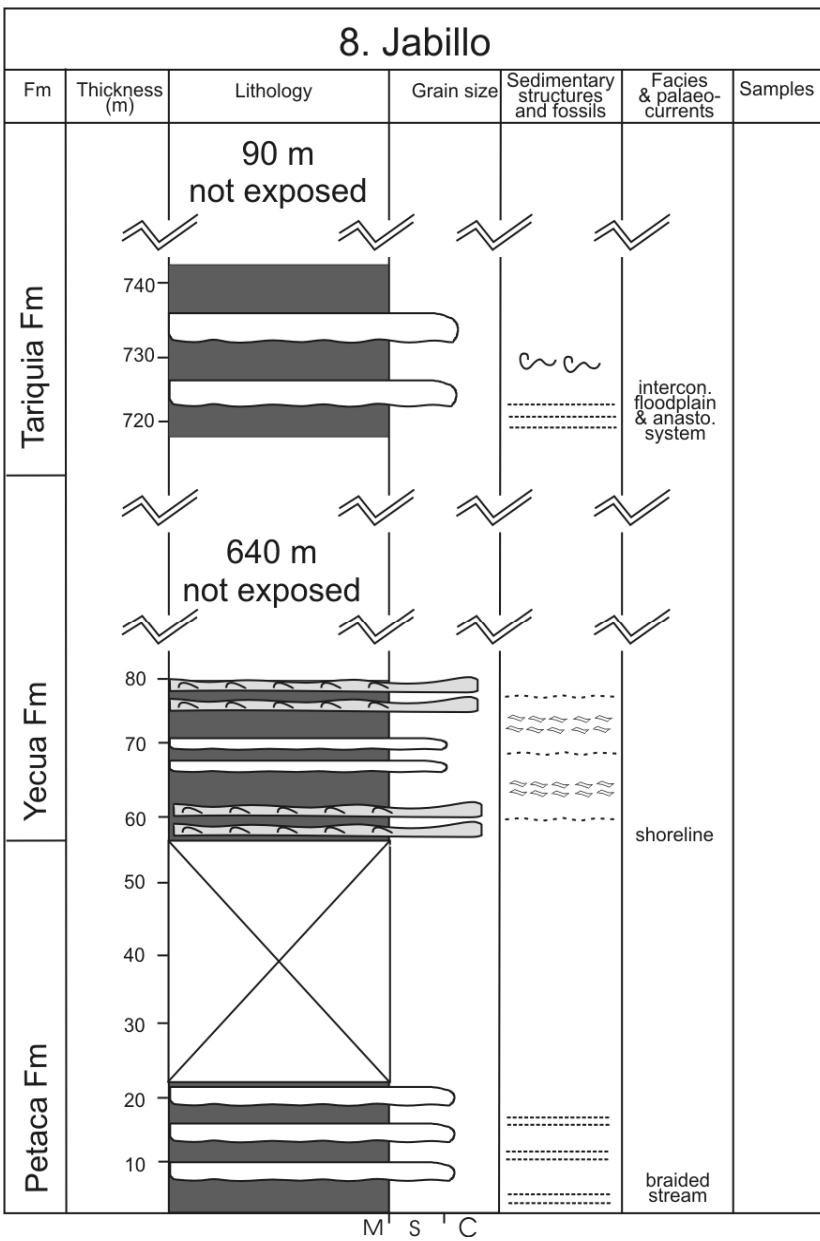
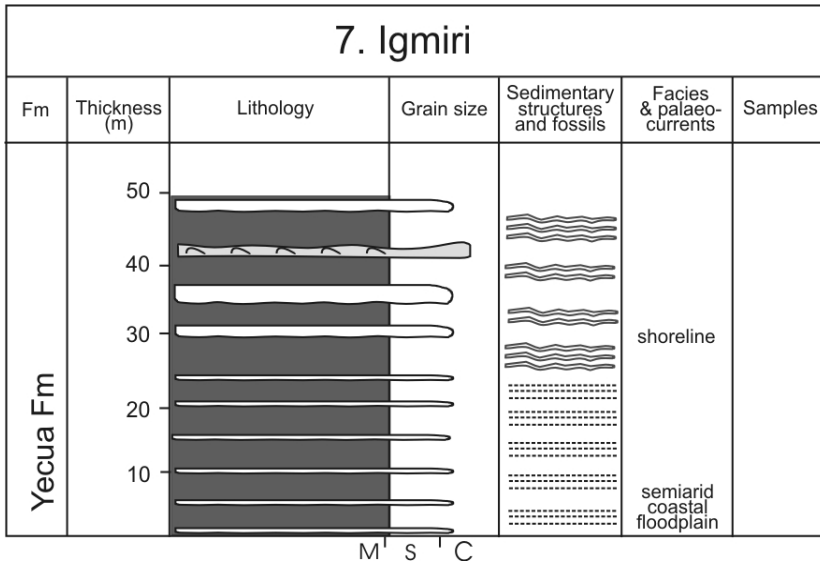


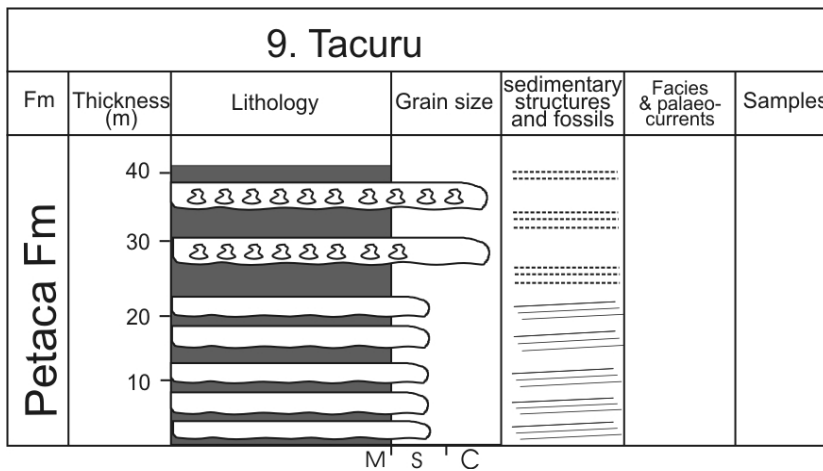
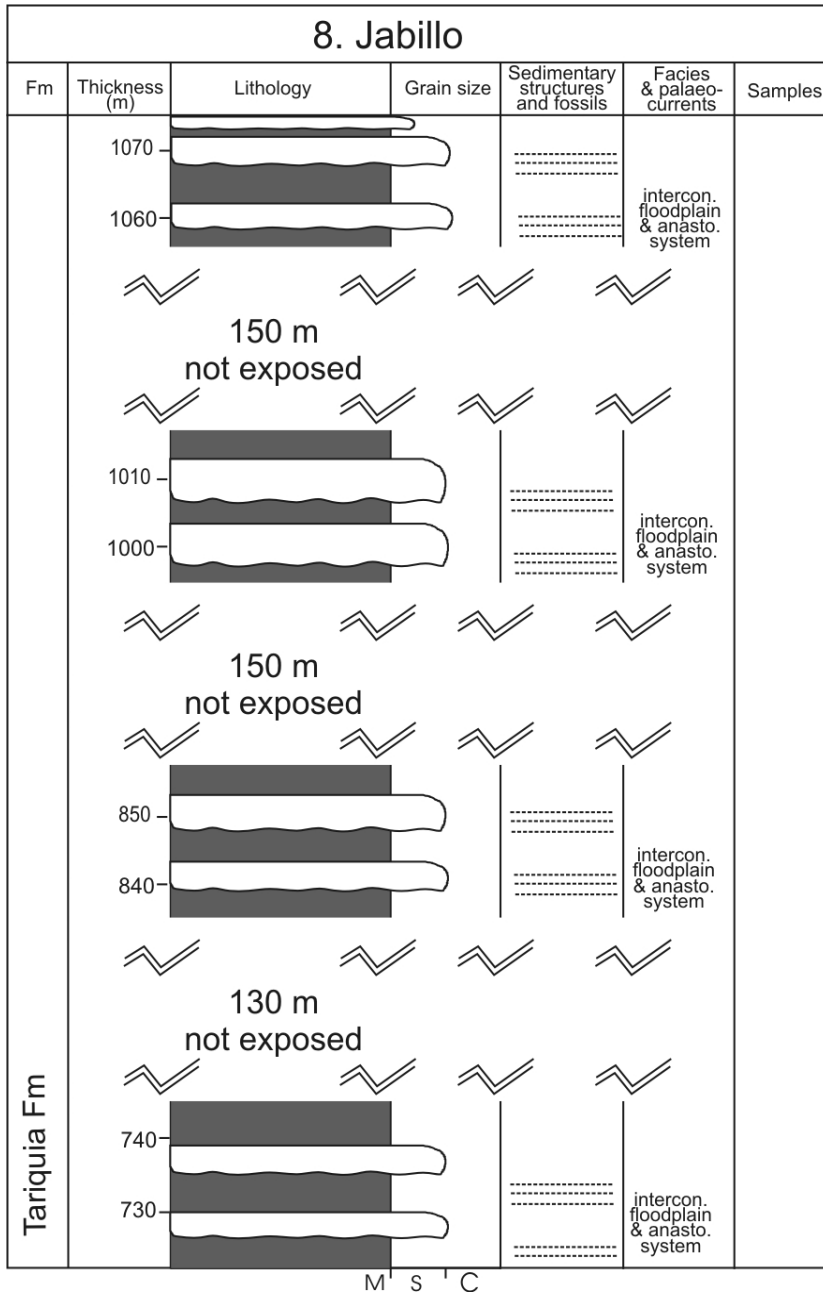
4. Khara-Khara						
Fm	Thickness (m)	Lithology	Grain size	Sedimentary structures and fossils	Facies & palaeo-currents	Samples
Yecua Fm	20 10				shallow marine	

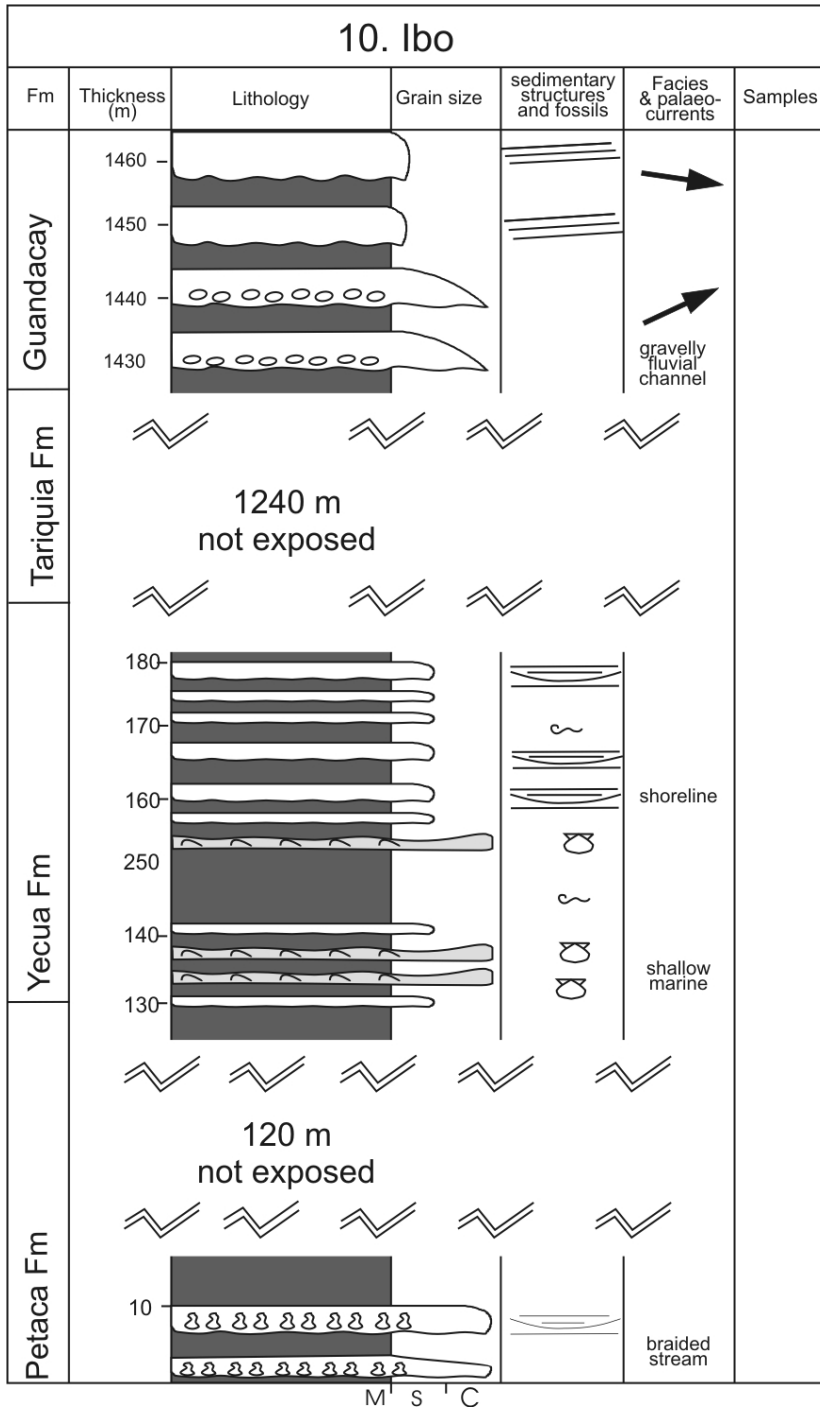
M | S | C

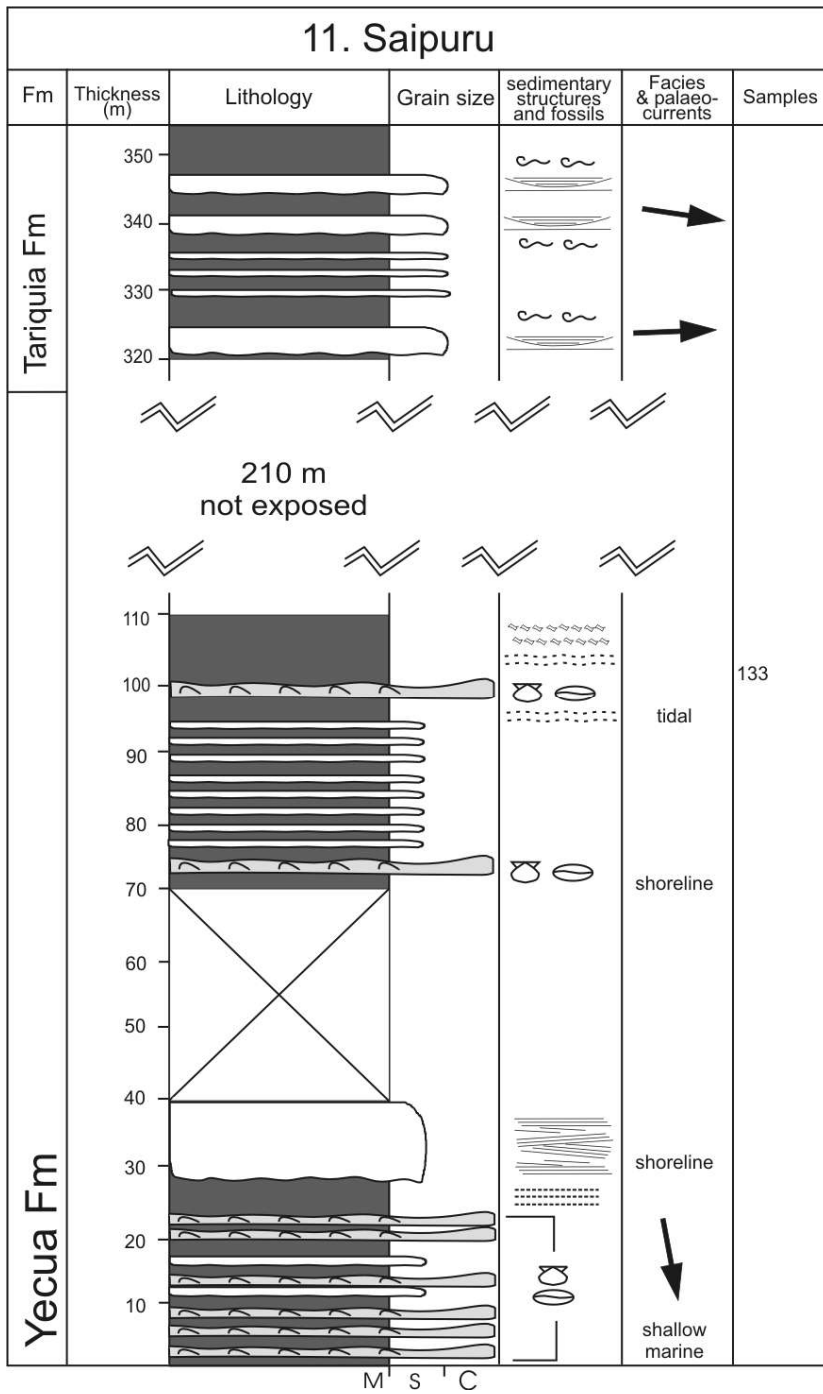
6. Massavi						
Fm	Thickness (m)	Lithology	Grain size	Sedimentary structures and fossils	Facies & palaeo-currents	Samples
Tariquia Fm	540 530 520					164 160
Yecua Fm	130 120 110 100				anast. stream & floodplain	159
Petaca Fm	20 10				braided stream floodplain	

M | S | C

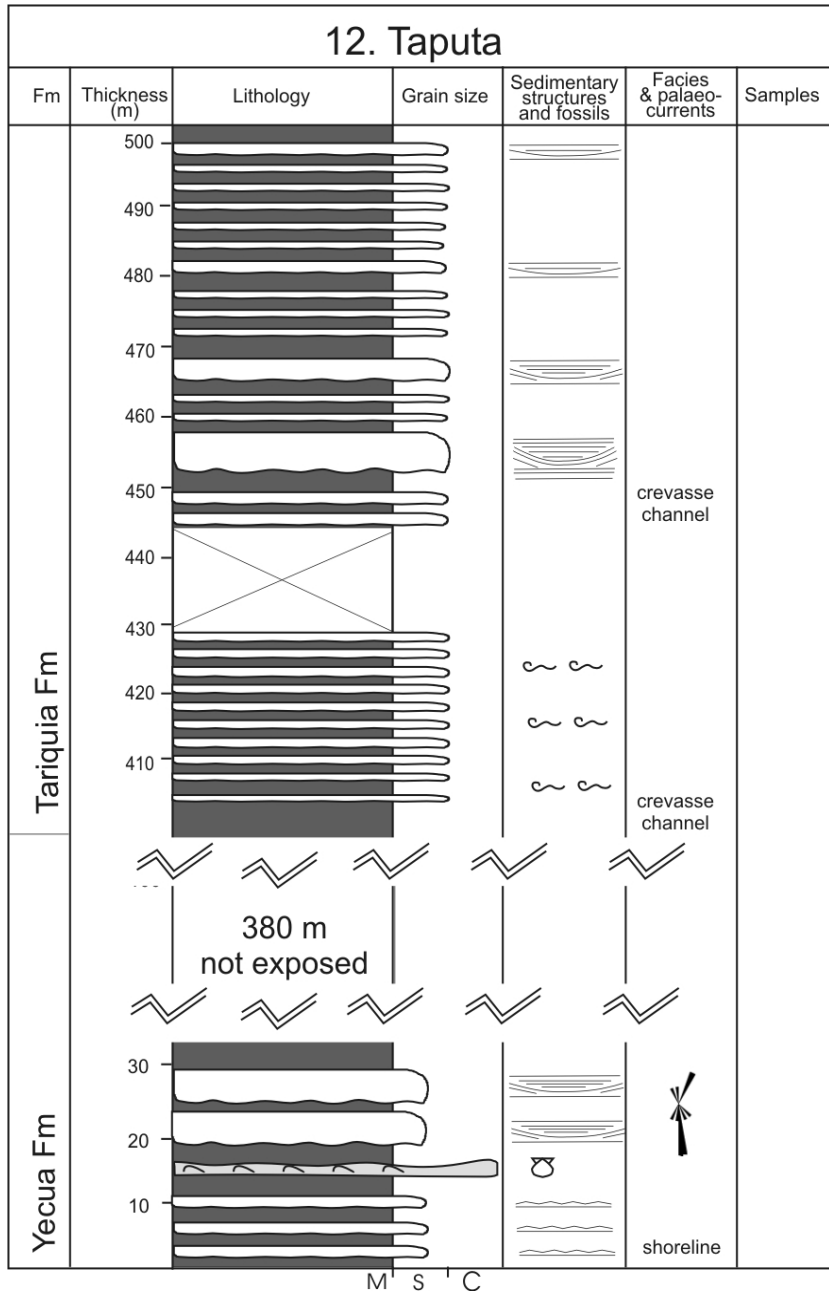


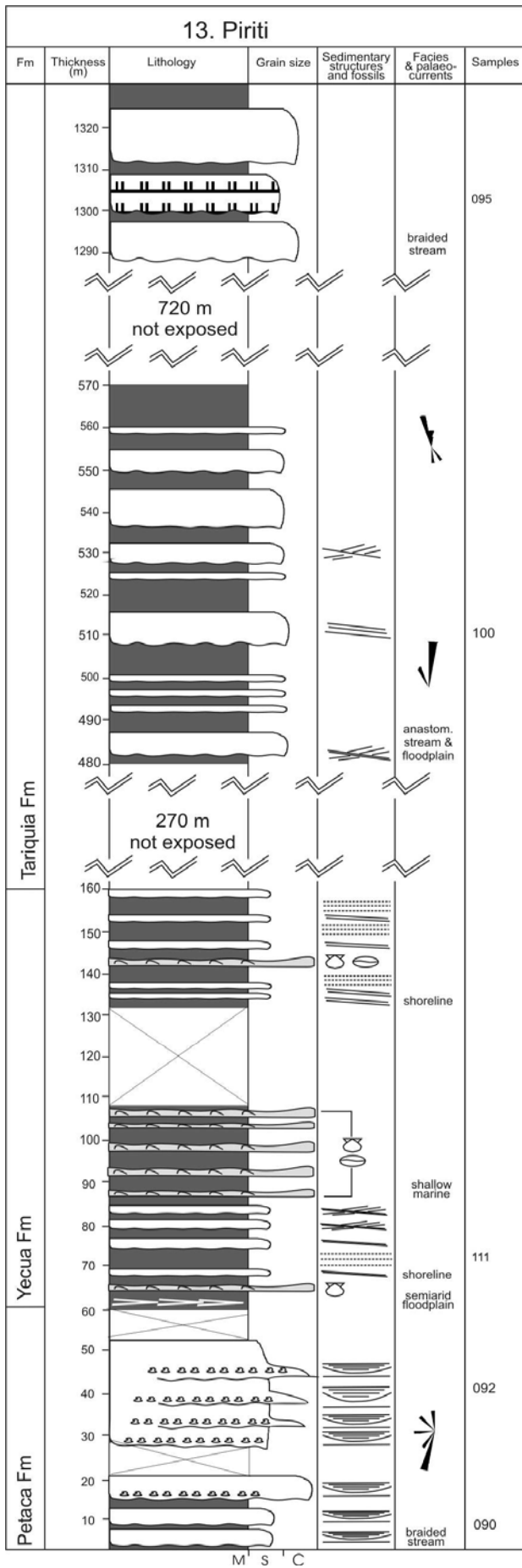


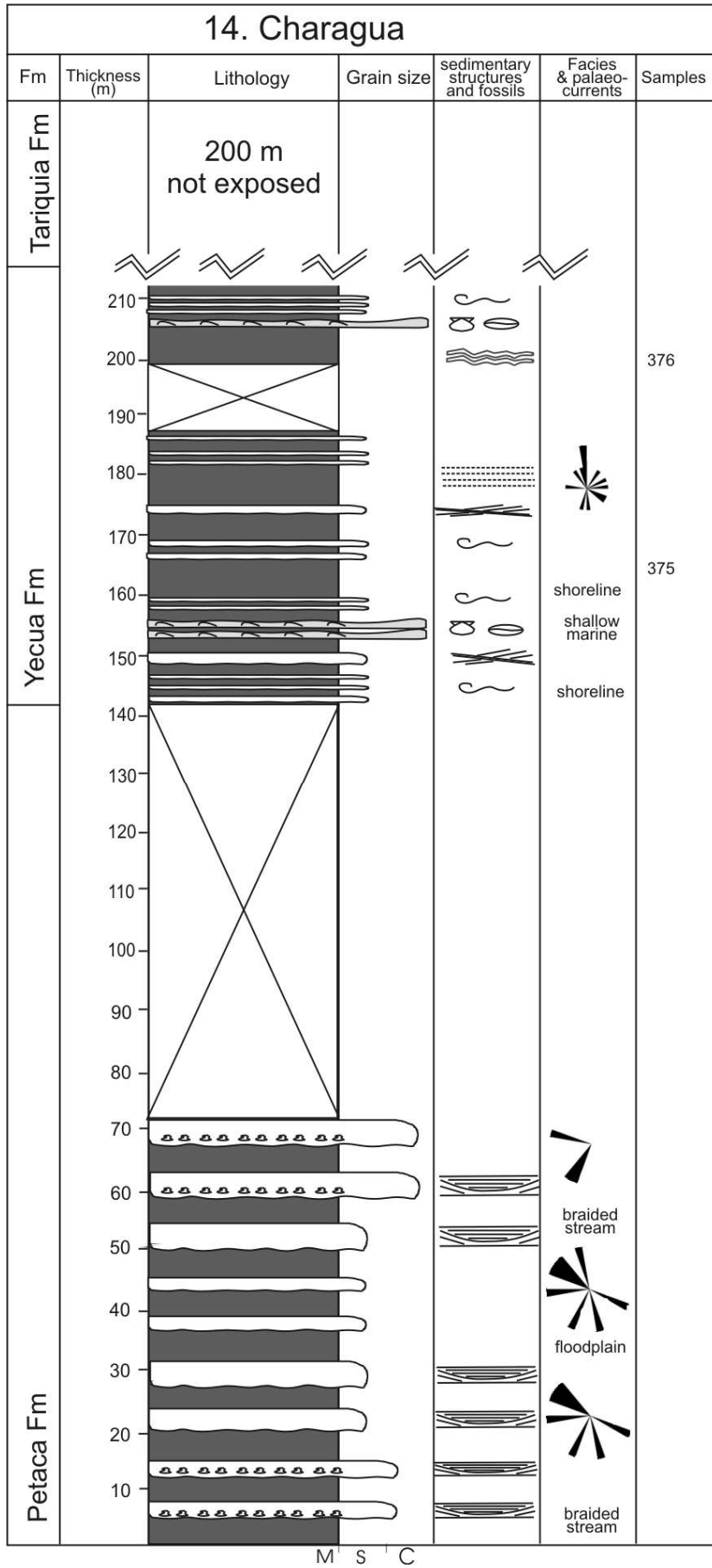


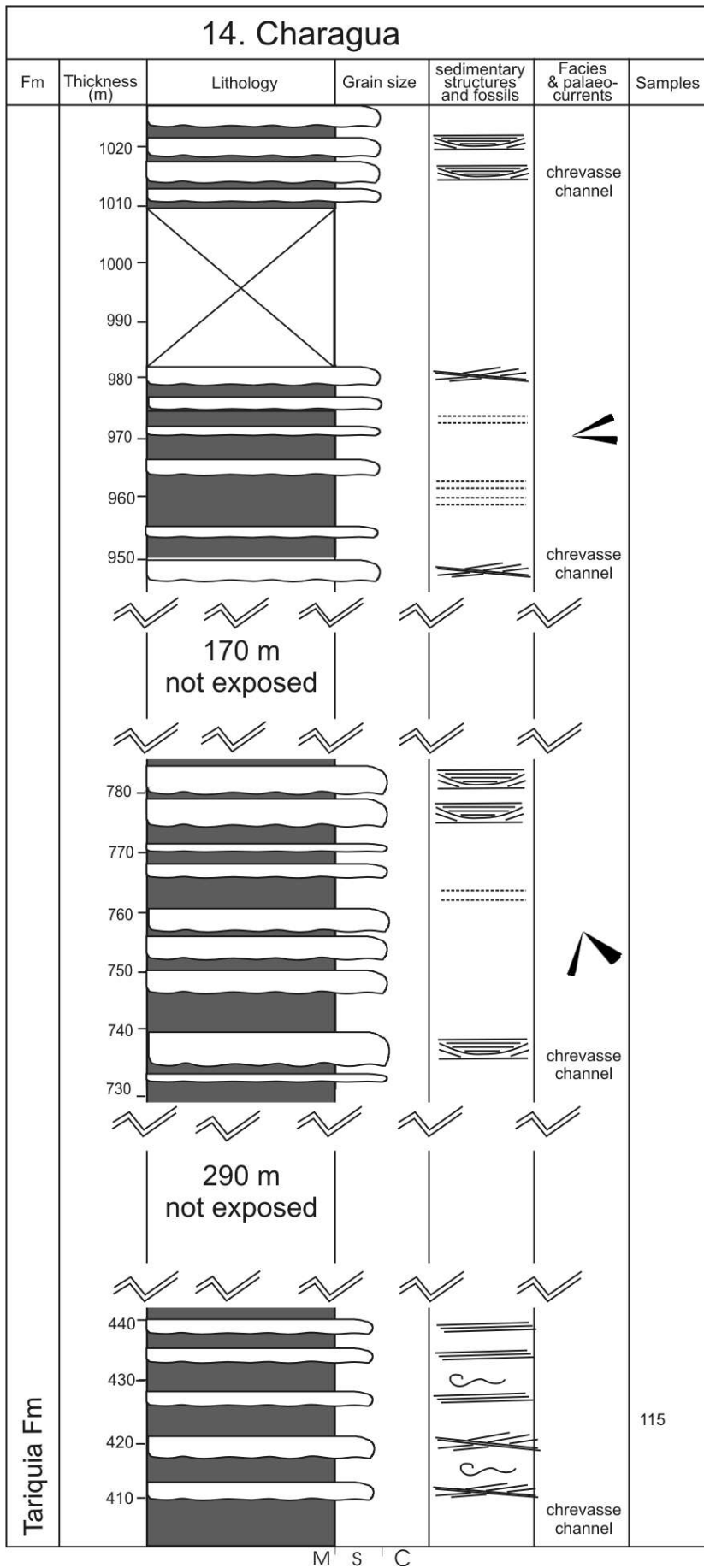




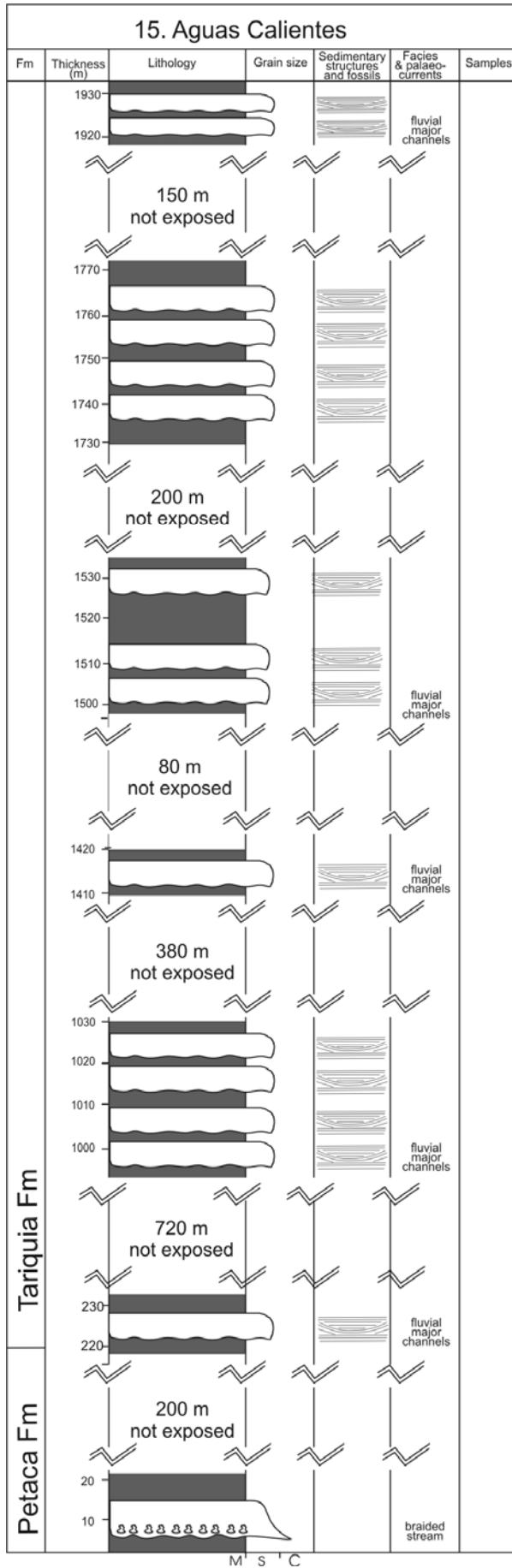


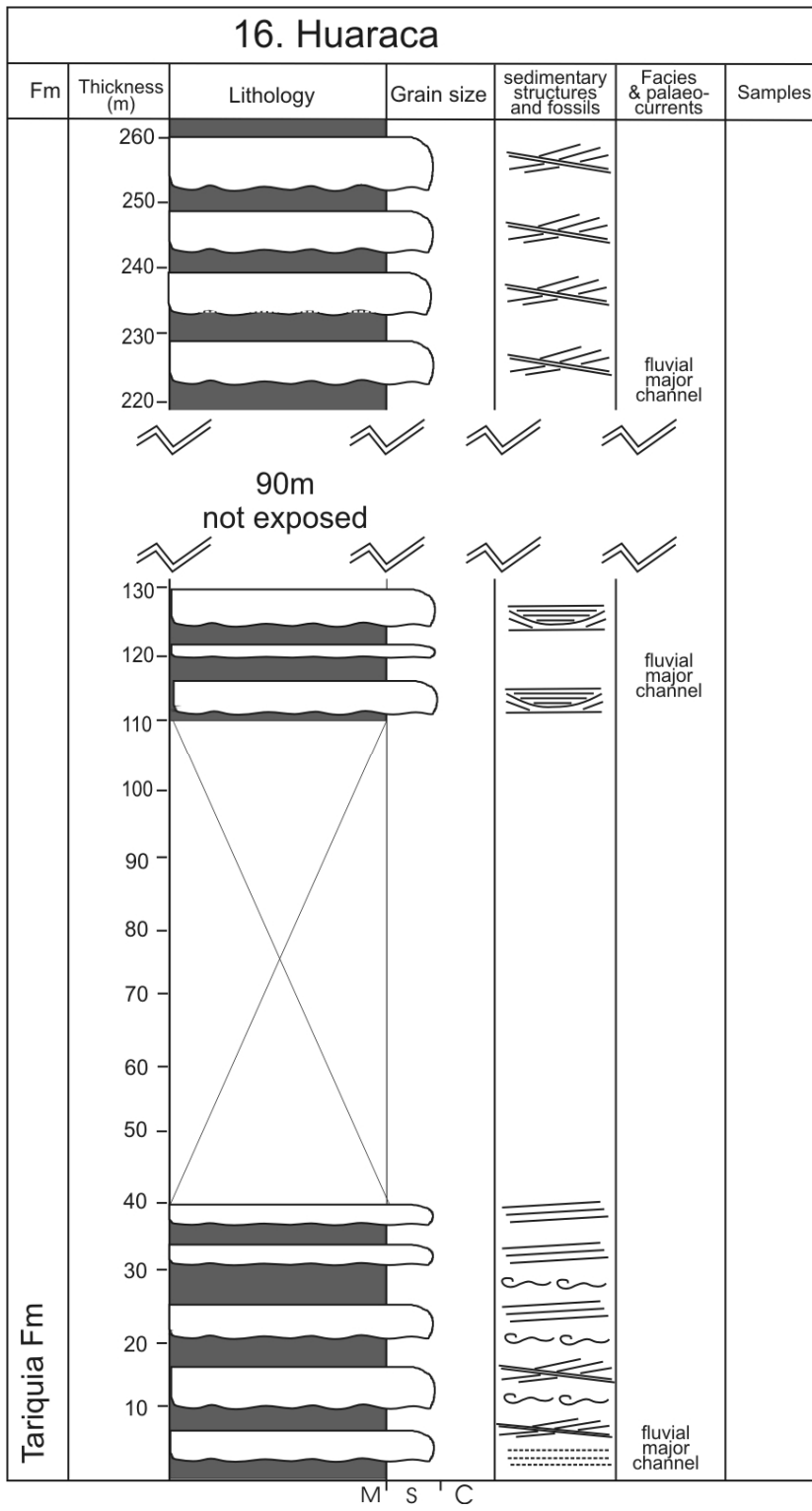






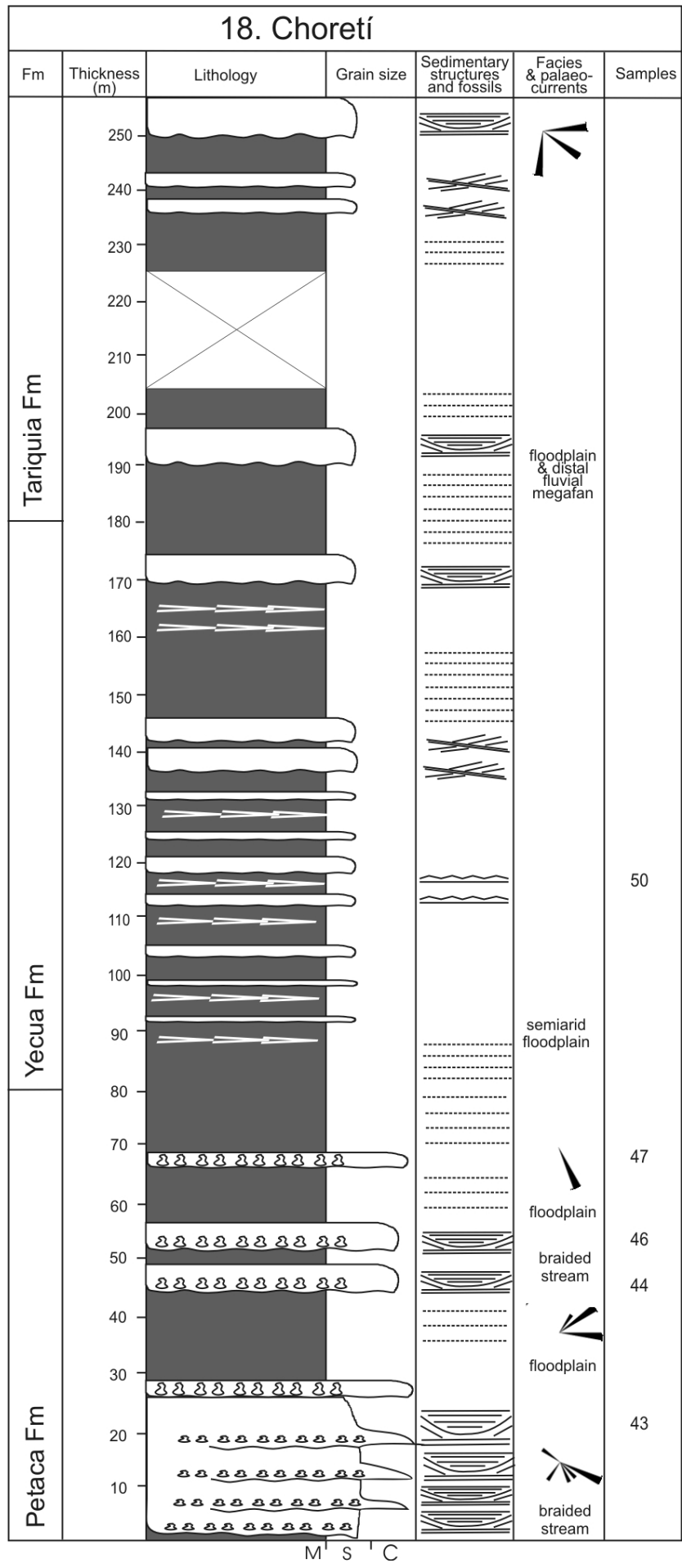
M S C



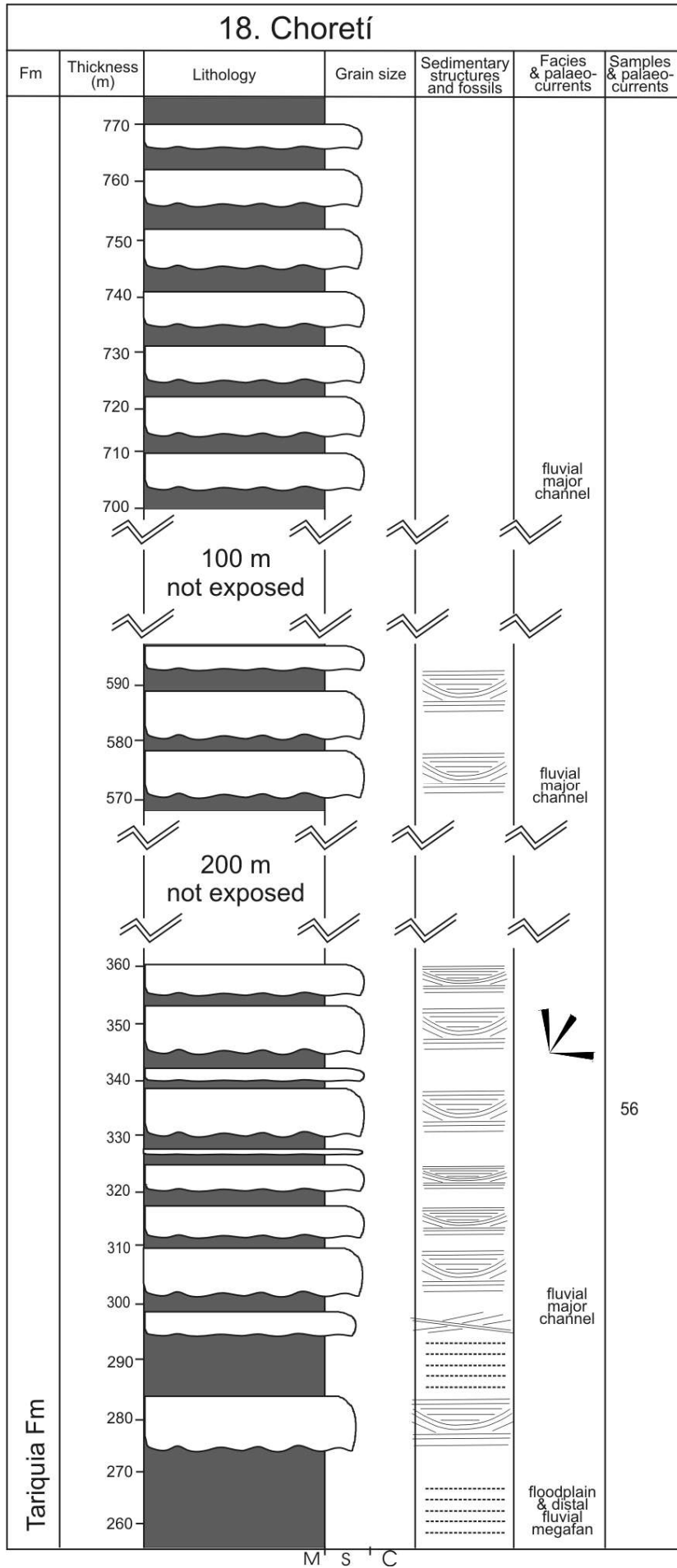


17. Yacumba							
Fm	Thickness (m)	Lithology	Grain size	sedimentary structures and fossils	Facies & palaeo-currents	Samples	
Tariquia Fm	570						
	560						
	550						
	140 m not exposed						
	420						
	410					fluvial major channel	
	70 m not exposed						
	330						
	320						
	310					fluvial major channel	
140 m not exposed							
170							
160							
150						fluvial major channel	
120 m not exposed							
30							
20							
10						fluvial major channel	
						307	

M | S | C







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