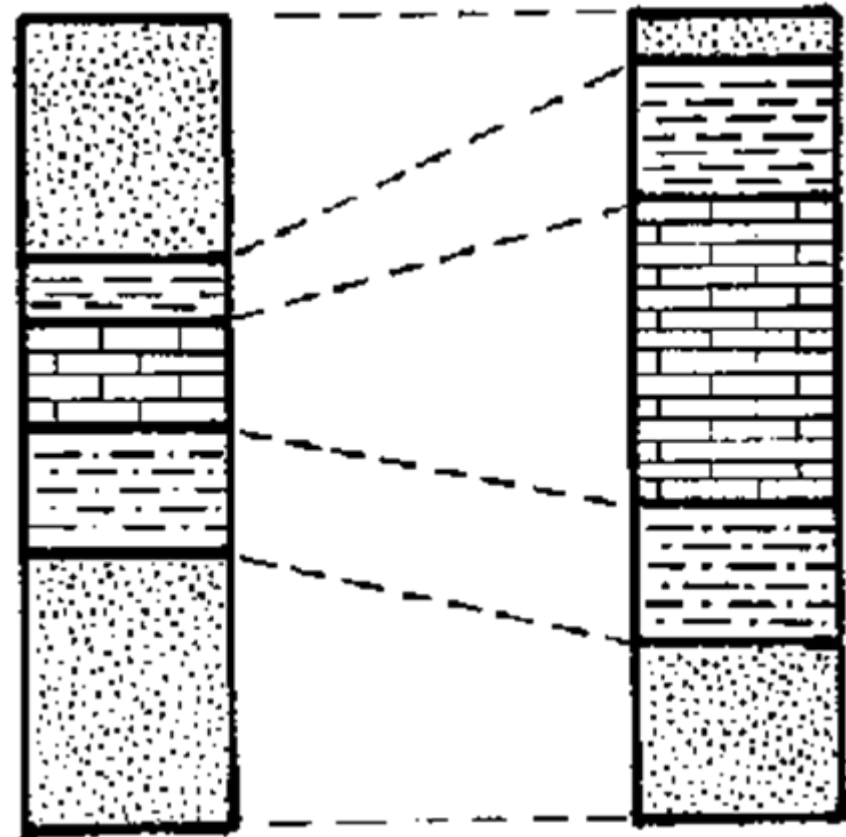
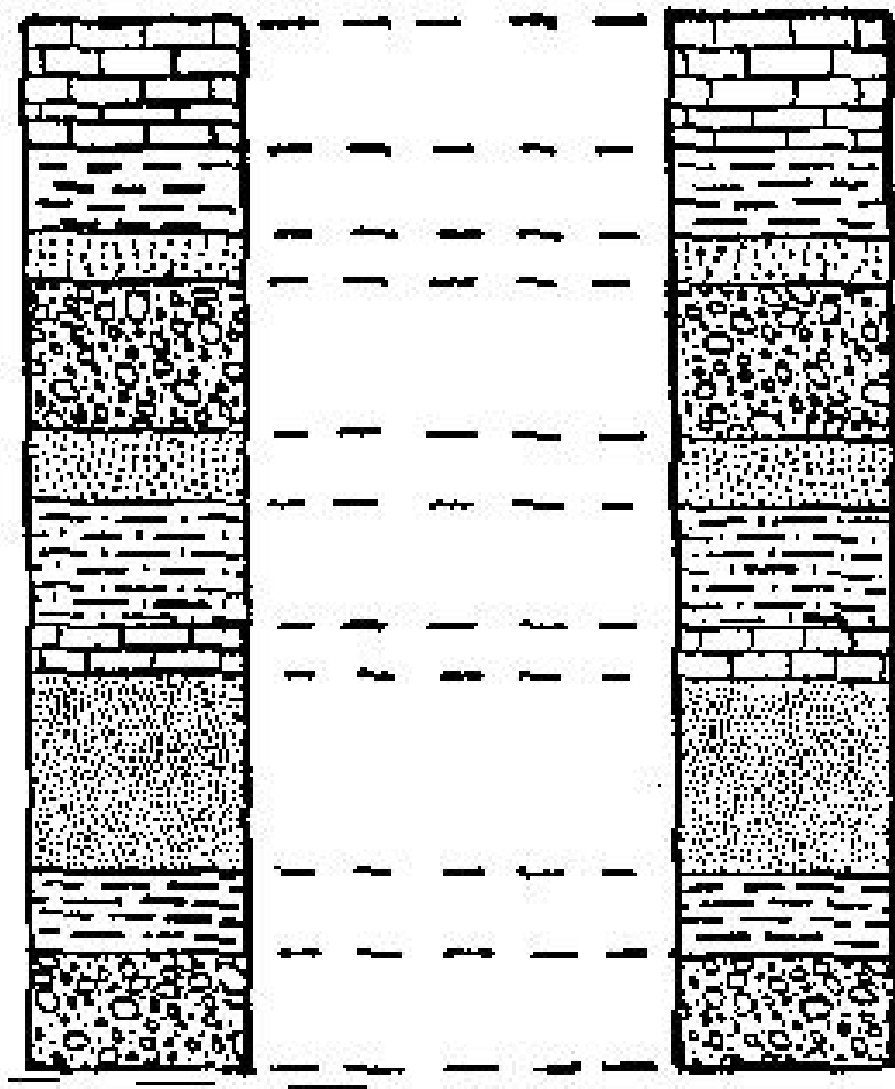
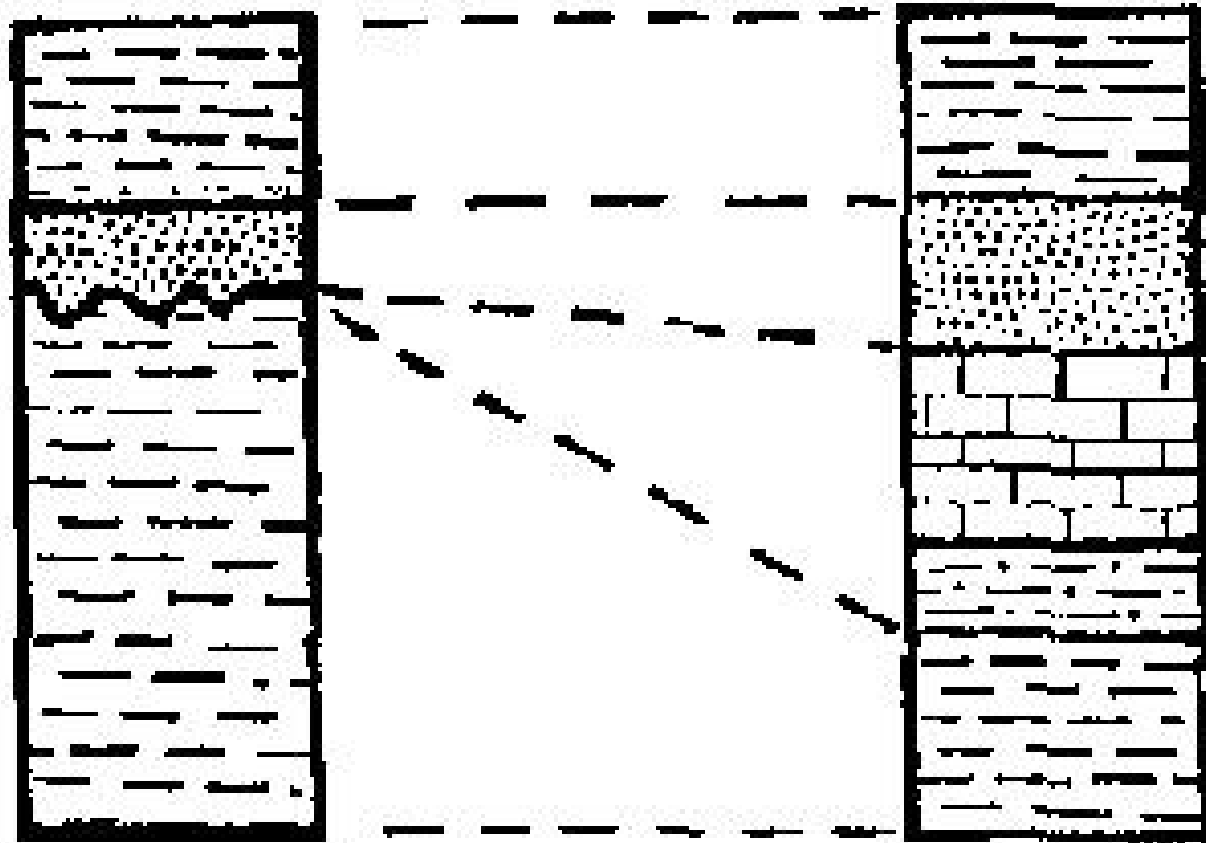
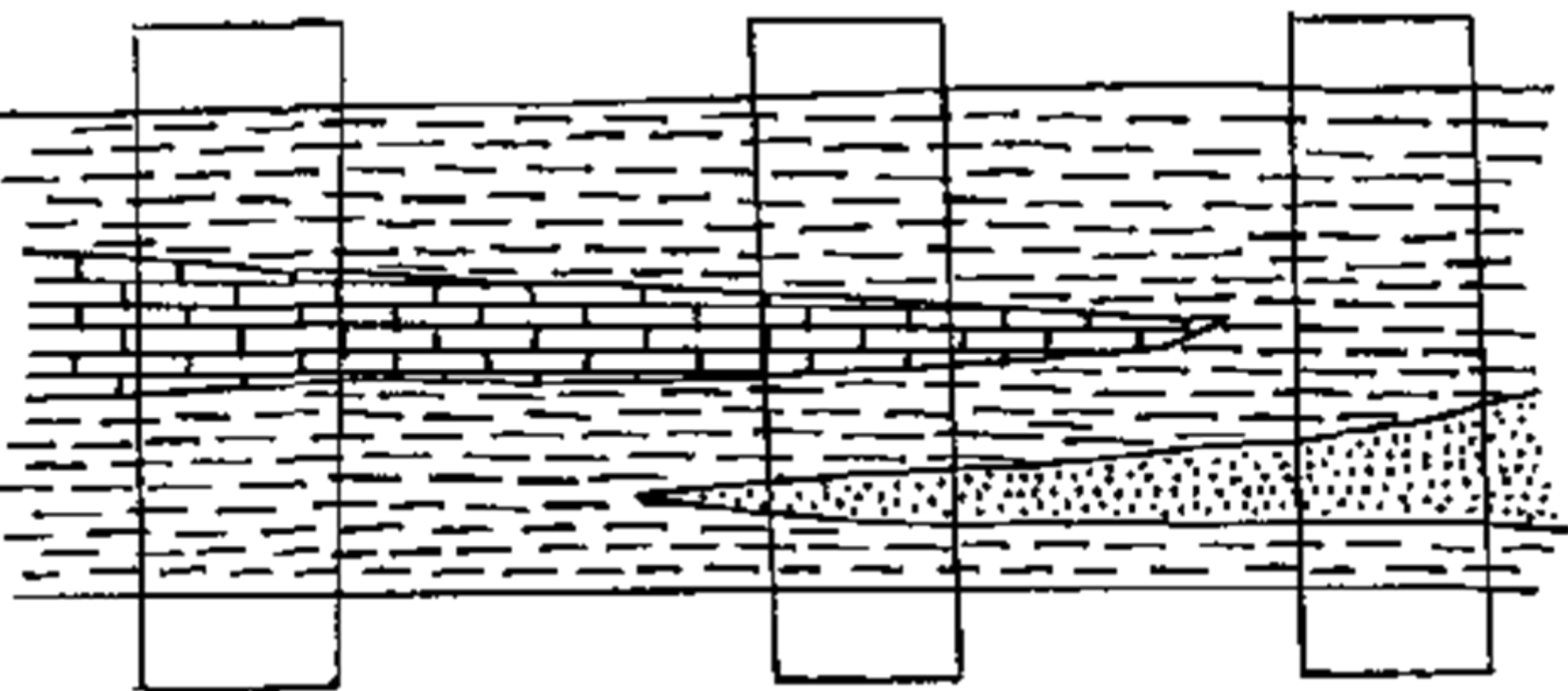




Unconformity





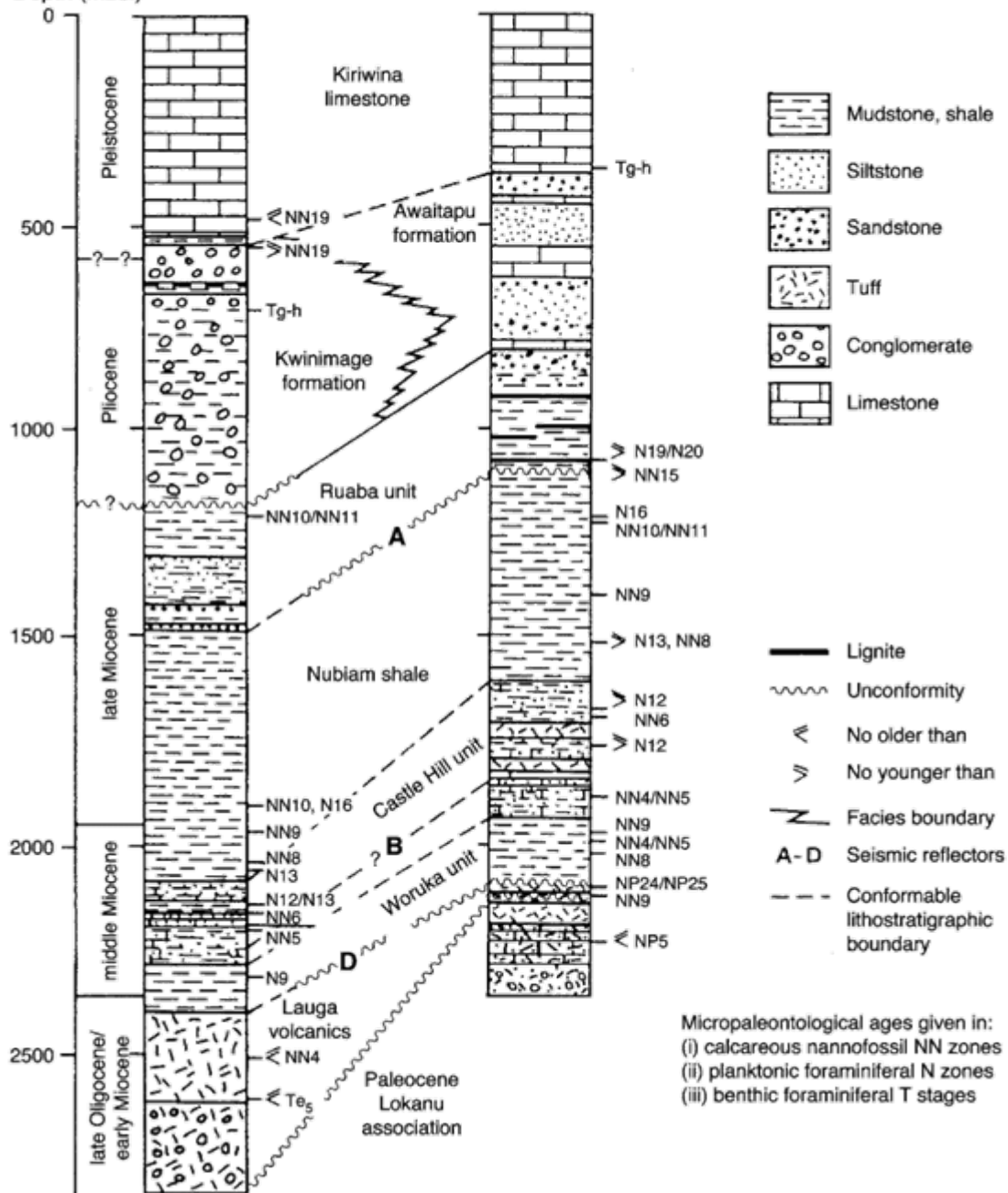
SW

NE

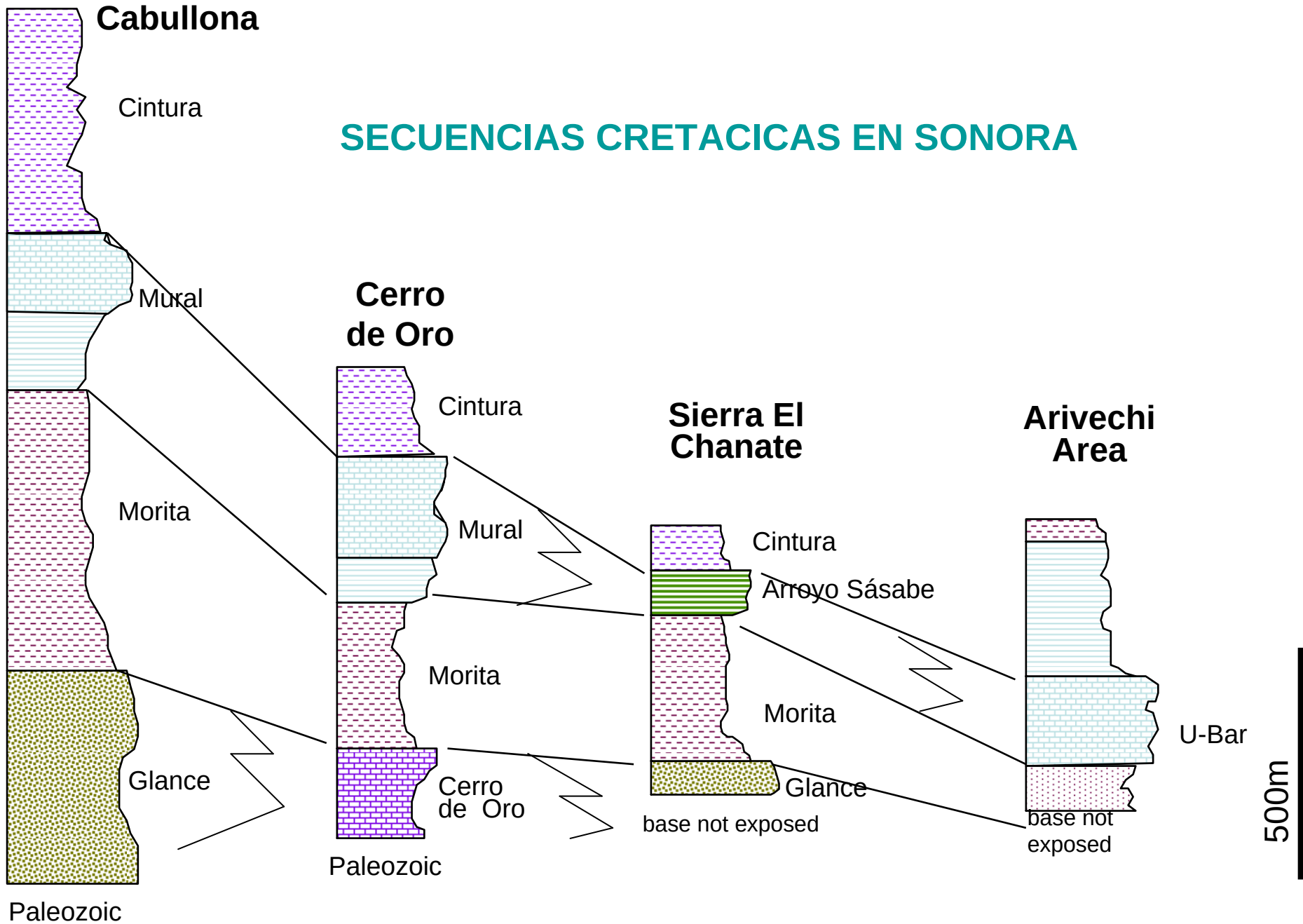
Goodenough 1 well

Nubiam 1 well

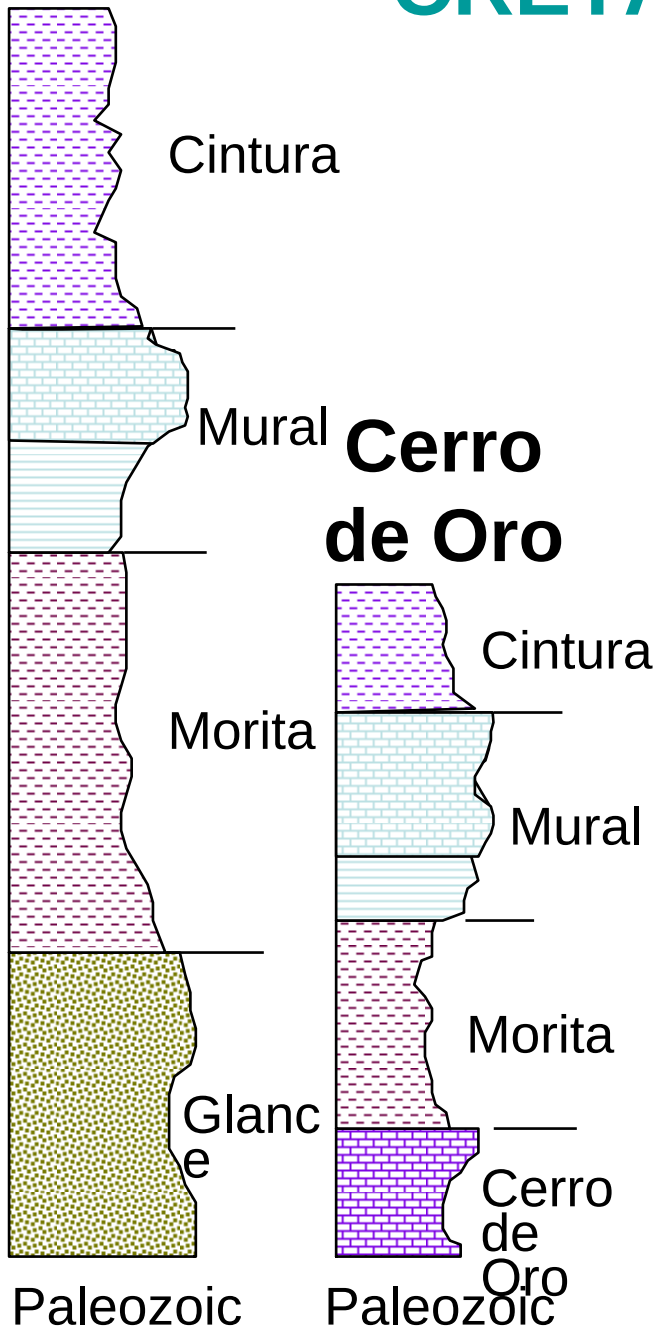
Depth (mbst)



SECUENCIAS CRETACICAS EN SONORA



Cabullona CRETACEOUS SECTIONS IN SONORA

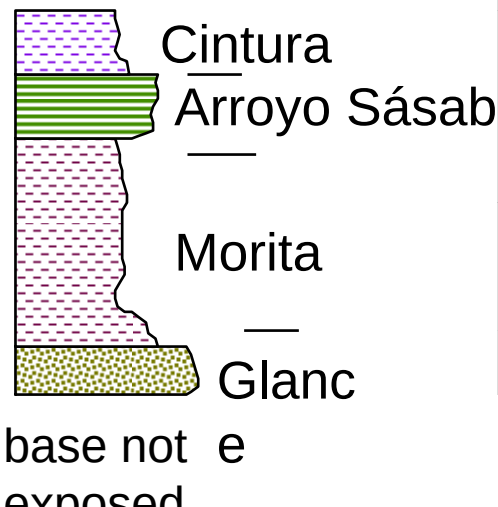


500m

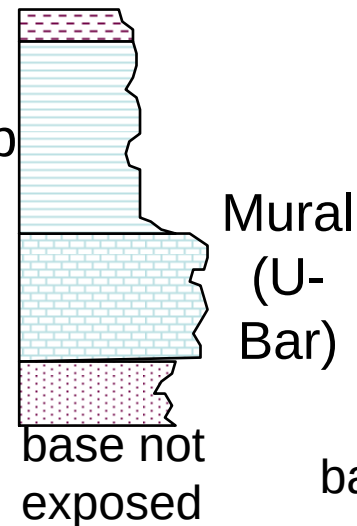
Huepac Area



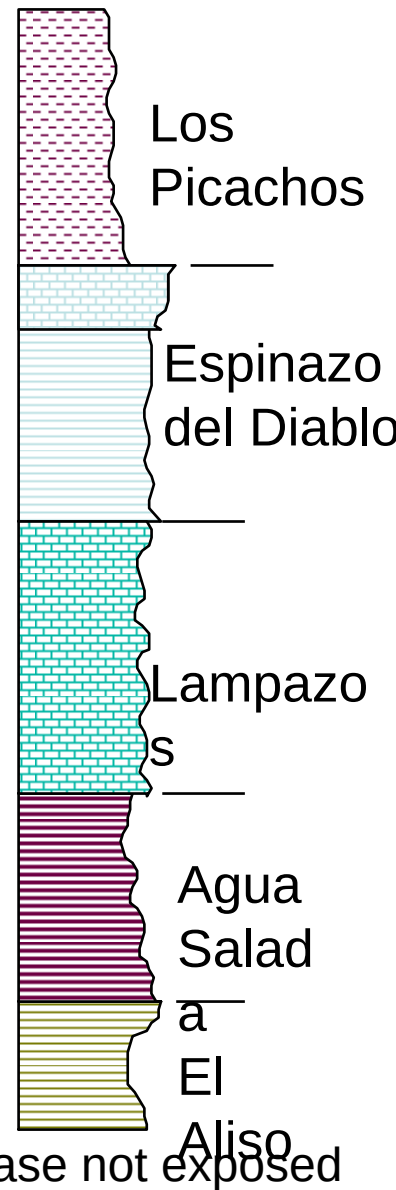
Sierra El Chanate

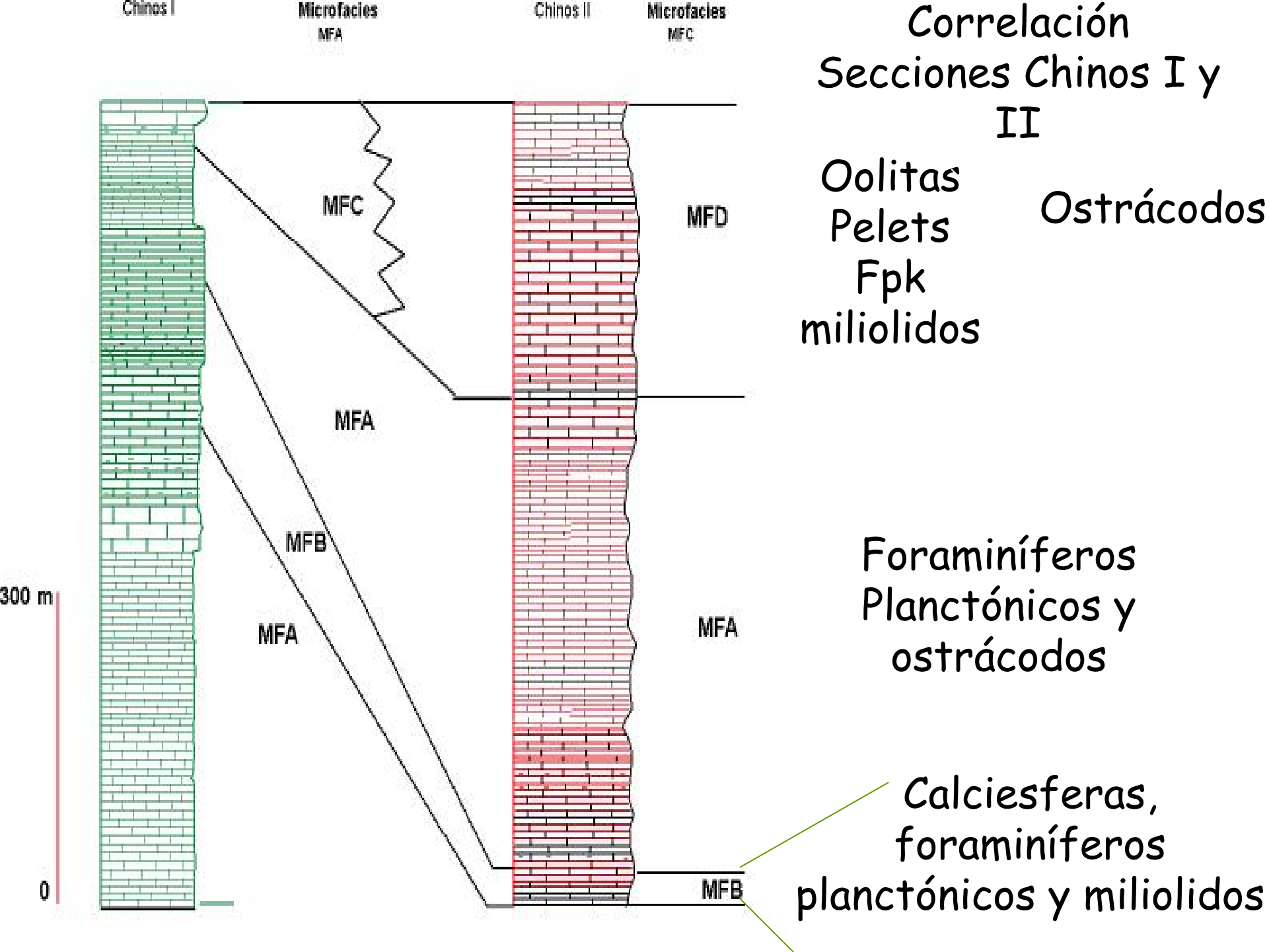


Arivechi Area

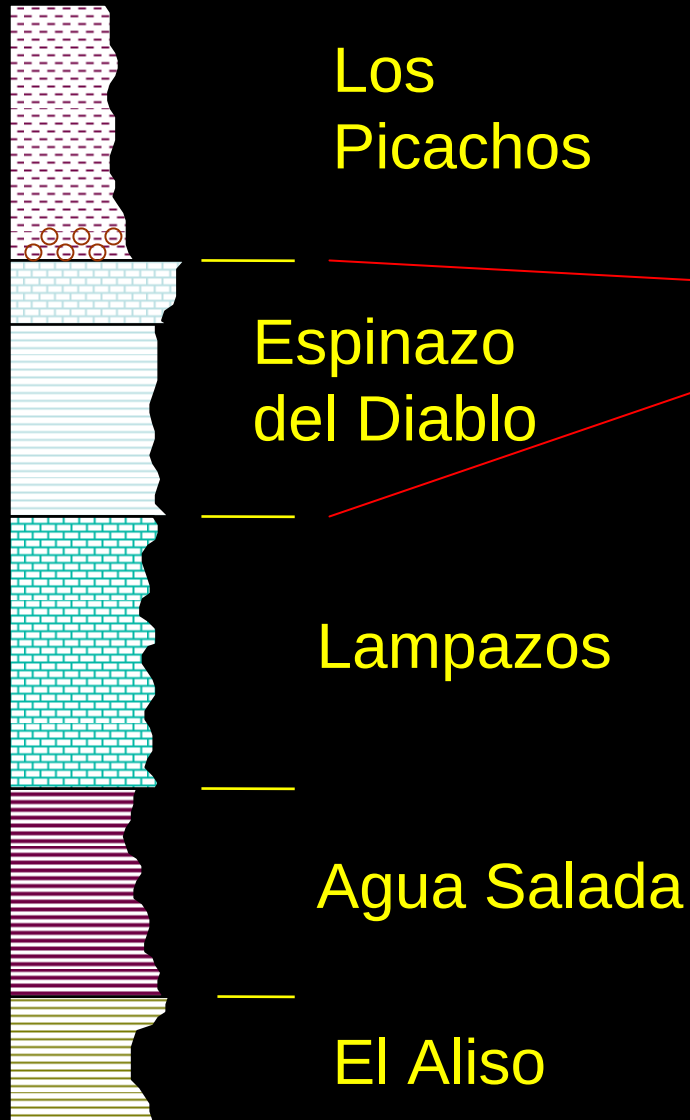


Lampazos

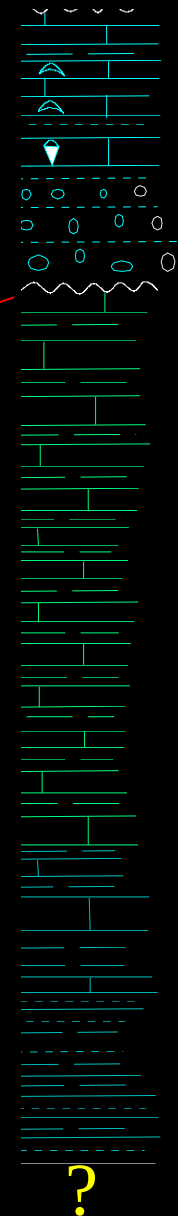




Lampazos



Sierra Los Chinos



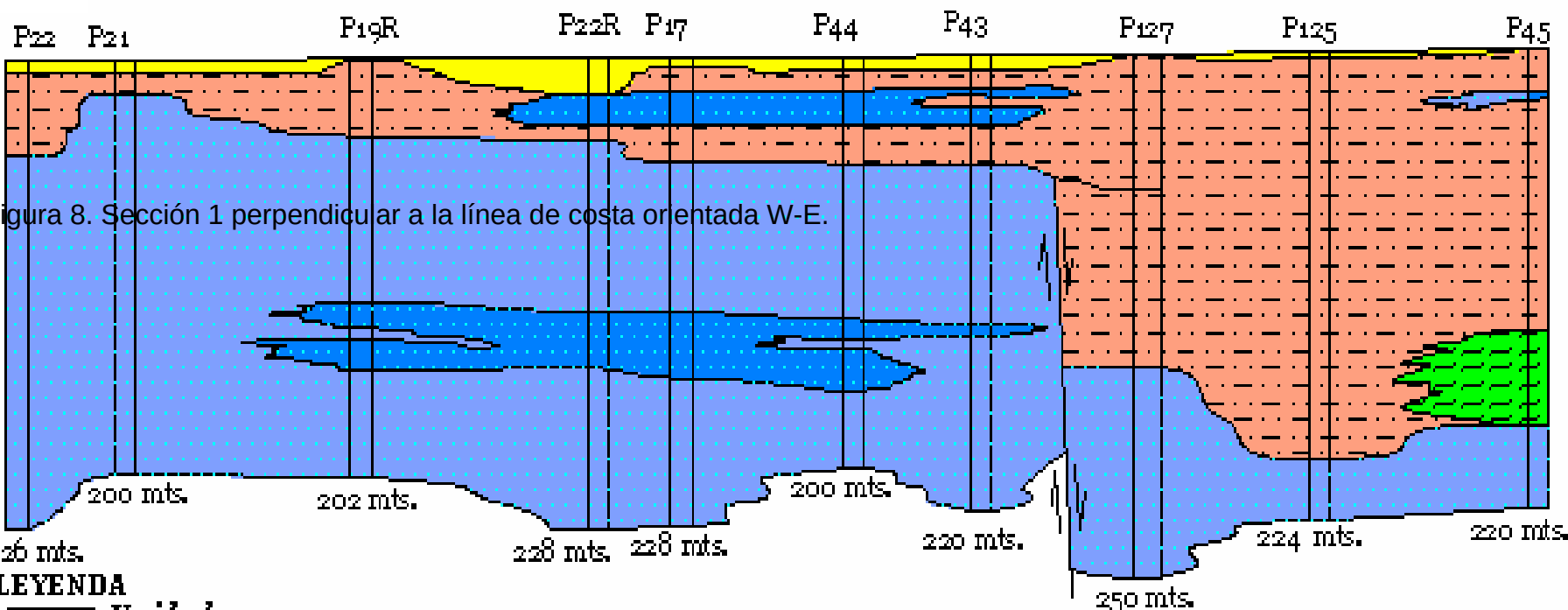
Los Picachos

Lampazos

Agua Salada

Sección 1 perpendicular a la costa

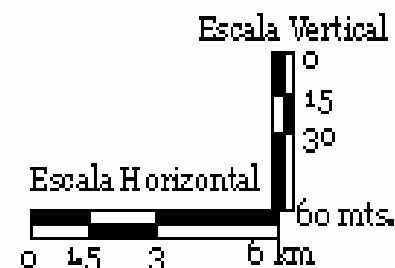
E



LEYENDA

- Unidad 1**
(Arcillas.)
- Unidad 2**
(Arenas, arenas arcillosas.
Ocasionalmente arcilla café y gravillas.)
- Unidad 3**
(Arenas, gravas, boleos, gravillas.
Ocasionalmente por arenas arcillosas y arcilla café.)

- Lente de gravas.
- lente de arenas arcillosa.
- Falla



Paciencia-102

Topila-5

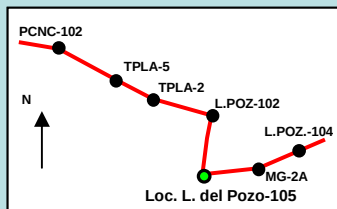
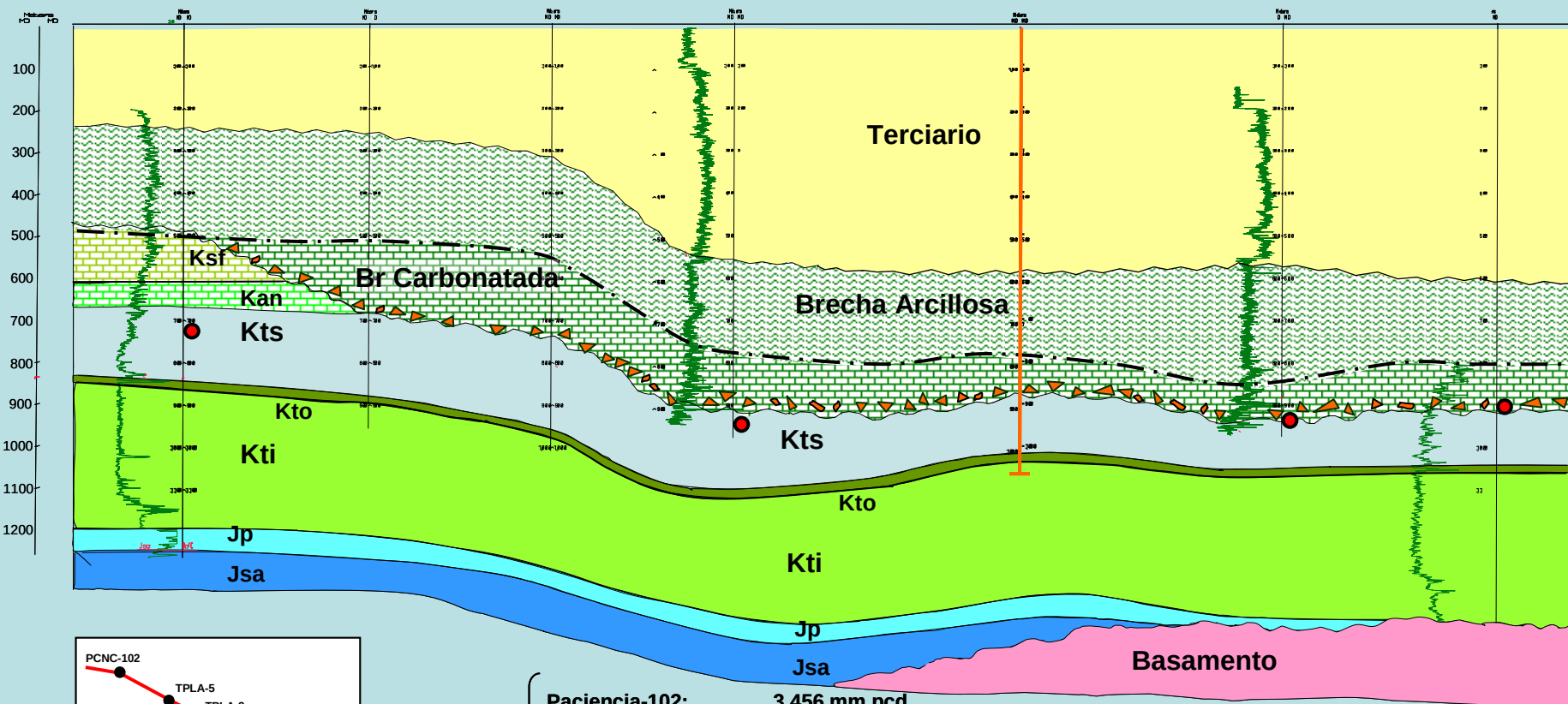
Topila-2

L. del Pozo-102

Loc. Loma del Pozo-105

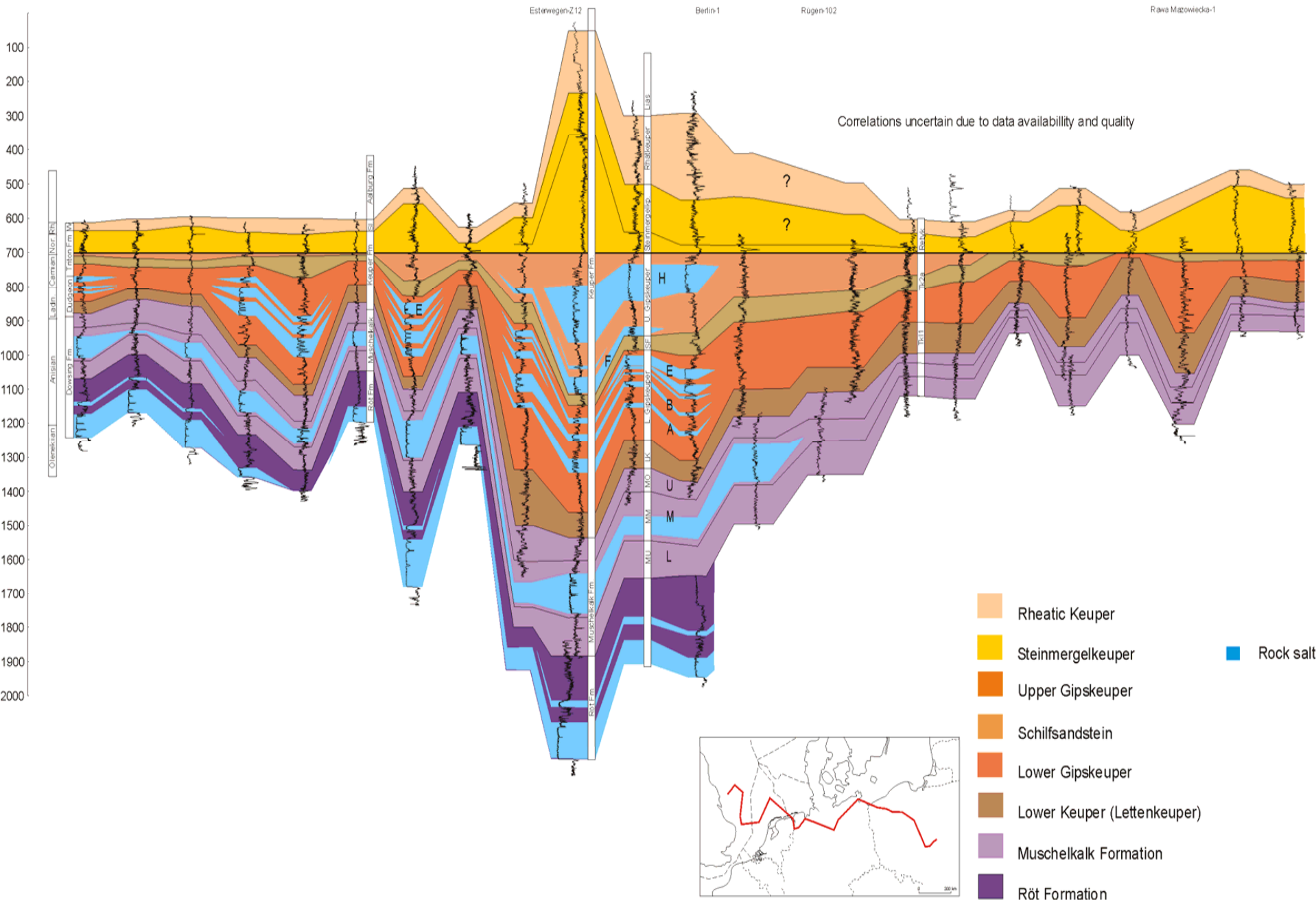
Mex Gulf 2A

L. del Pozo.-104

CO₂

Paciencia-102:	3.456 mm pcd
Loma del Pozo-102:	1.660 mm pcd
Mex Gulf- 2A:	3.200 mm pcd
Loma del Pozo -104:	3.014 mm pcd

42/30-6 43/12-1 44/21-3 49/21-3 53/2-2 KI 7-1 L2-1 Welerveen-1 Rönbrod-11/2 Sande-21 bevern-21 Sellen-32/68 Lychen-259 Dargibell-10/93 Barkow-1 Czaplnek-IG1 Zabartow-2 Iorun-1 Jrszow-1 Mszczonow-IG1 Nadazyn-IG1



BISBEE

CUENCA CHIHUAHUA

LAMPAZOS

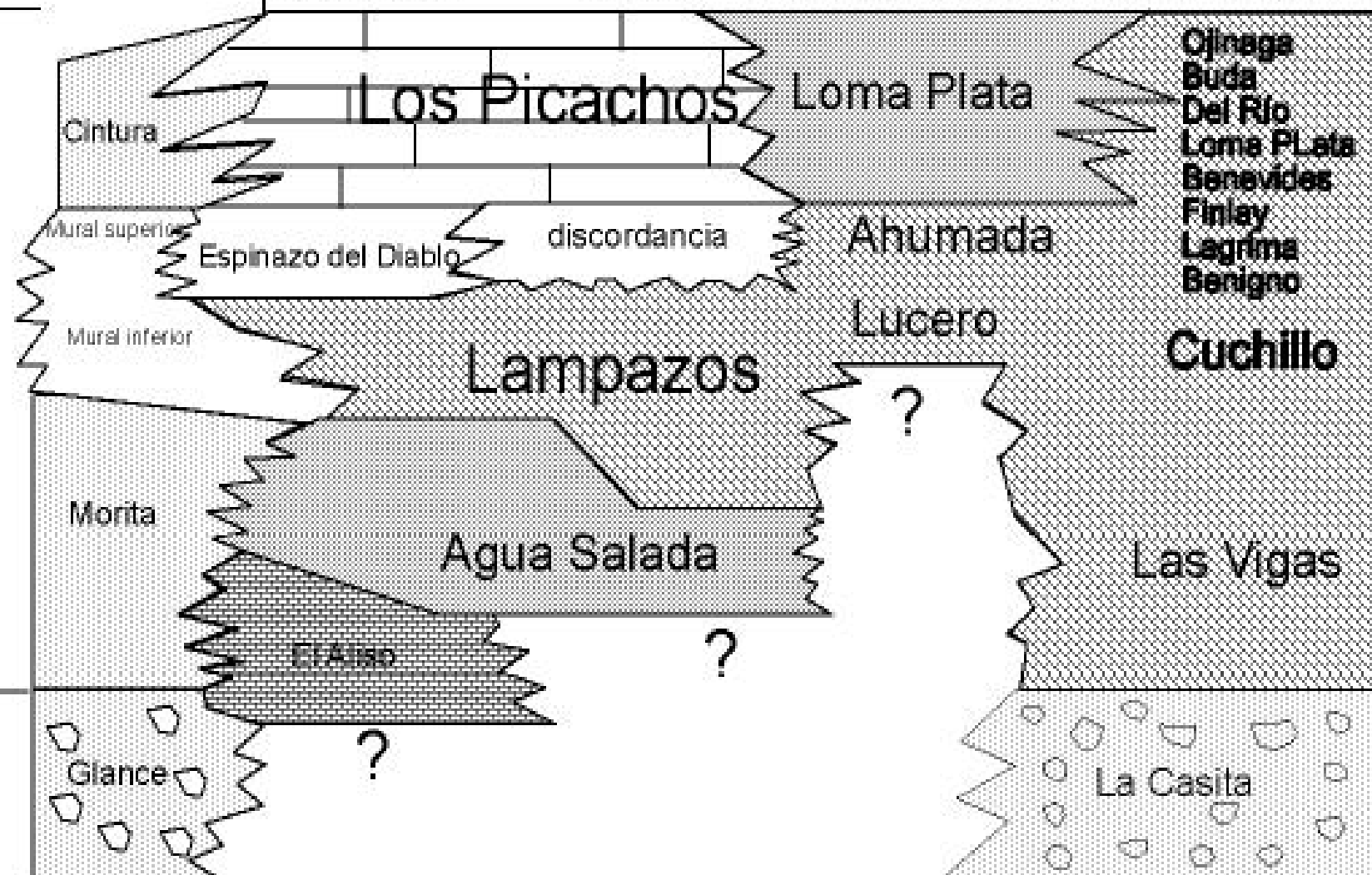
CHINOS

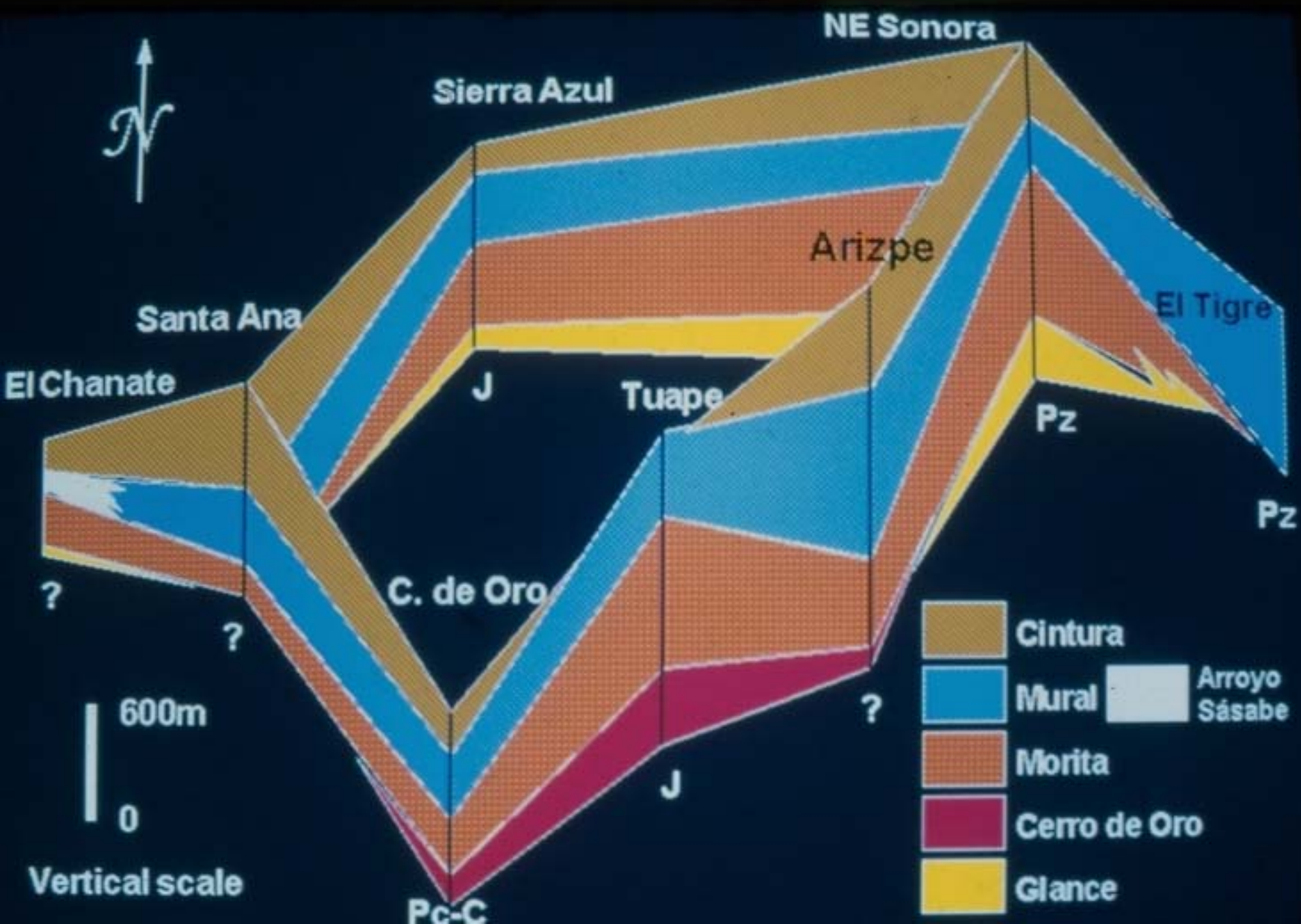
BANCO LUCERO

ESTE DE CHIHUAHUA

CRETACICO INFERIOR

JURASICO



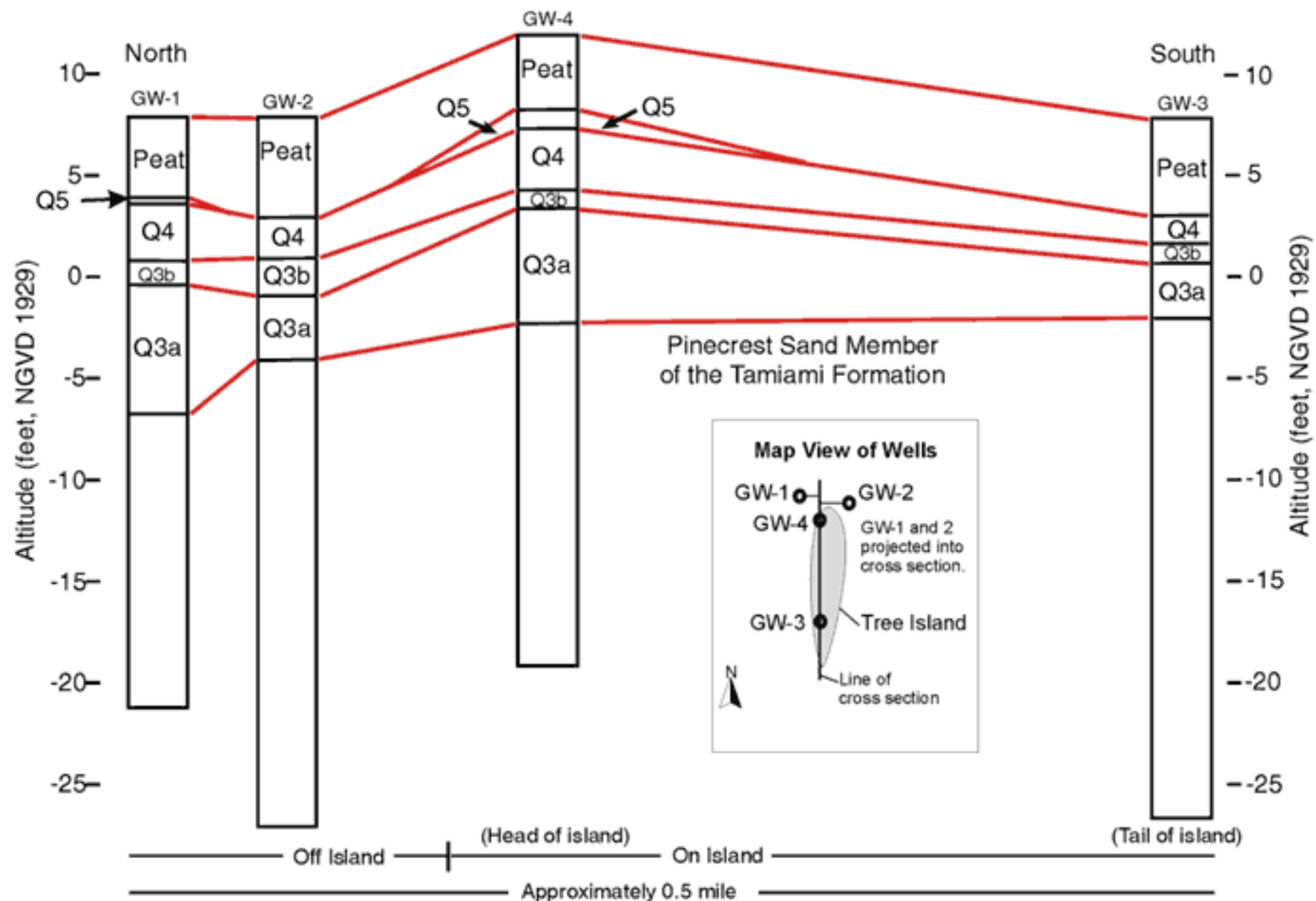


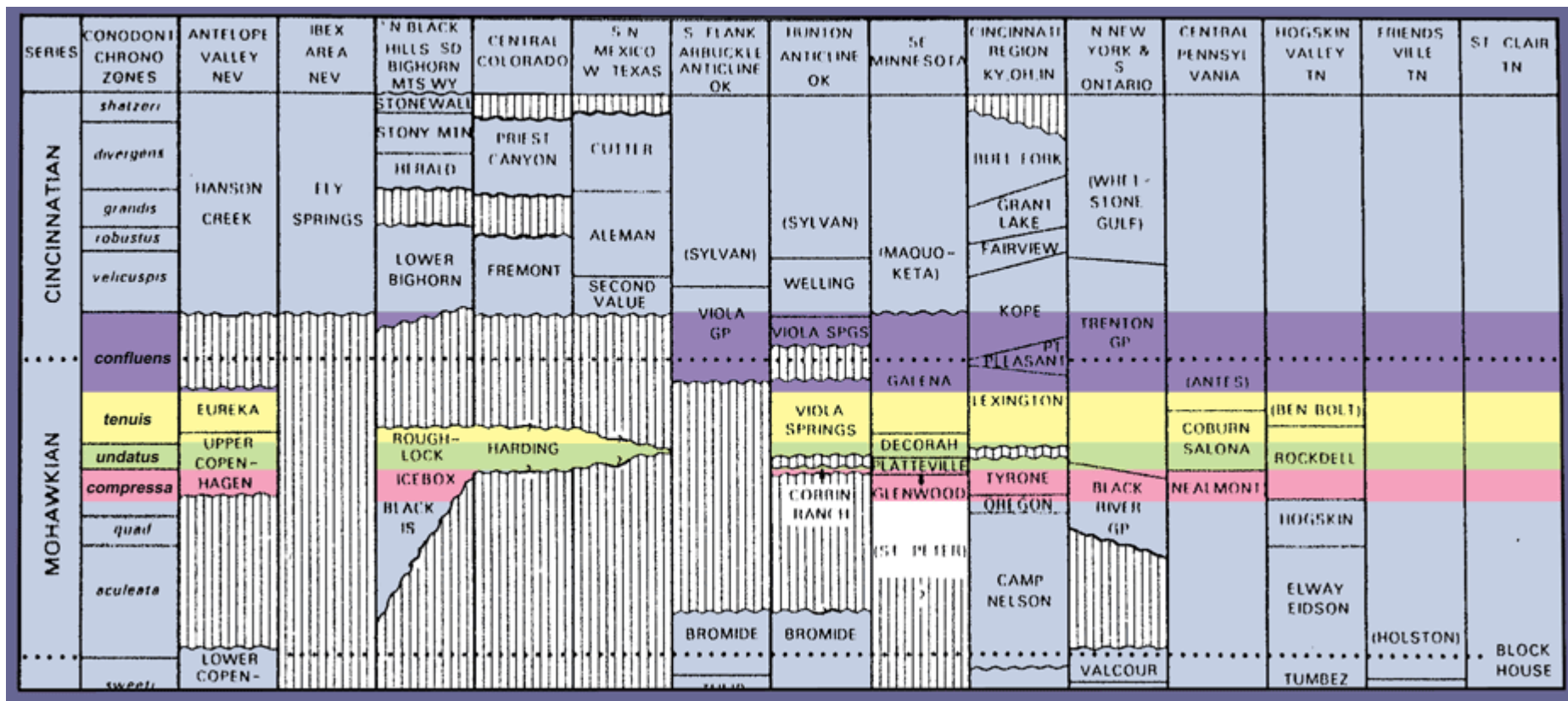
E D A D		Cuenca Bisbee	Lampazos	Banco de Lucero	Cuenca de Chihuahua
Cenomanian		Cintura	?	?	Ojinaga
Albian			Los Picachos		Loma Plata
		Mural	Espinazo del Diablo	Ahumada	Loma Plata
Clansagesian	Lampazos		Lucero	Benevides	
	Gargasian		Agua Salada	?	Finlay
					Lagrima Benigno
Bedoulian	Morita	Cuchillo			
	Cerro de Oro		Las Vigas		
Barremian				El Aliso	
Hauterivian		Glance			

AGE		Cabu- llona	Sierra El Tigre	Sierra Azul	Arizpe Area	Arivechi Area	Tuape Area	Santa Ana	Cerro de Oro	Sierra El Chanate		
Cenomanian									Cintur a	El Chanate		
Albian	U	Cintura	not exposed	Cintura	Cintura			Cintura	Mural	Cintura		
	L	Mural	Mural	Mural	Mural	Mural		Mural	Mural	Morita	Arroyo Sasabe	
Aptia n	U				Cerro de Oro							
	M											
	L	Morita		Morita	not exposed	not exposed			Morita	Cerro de Oro	Morita	
Barremian		Glance	not exposed	Glance			Morita	not exposed	pC/Pz	Glance		
Hauterivian												
Valanginian												
Berriasian												
JURASSIC												

Ammonite Zonation of the Texas Cretaceous from Hill to Travis County (F-J)

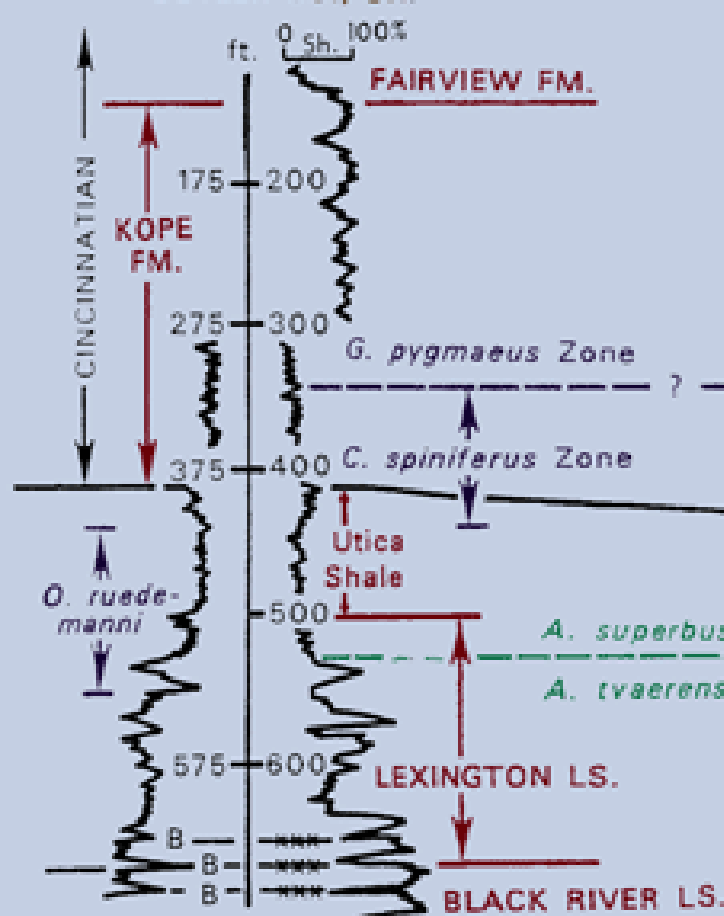
Rock Units		Location					Time Units			
Series	Group	F	G	H	I	J	Ammonite Zones	European Stage	mya	Period
Gulf Series	Navarro Group						<i>Sphenodiscus pterisegia</i> (Conrad)	Upper Maastrichtian	65.4	Upper Cretaceous
	Taylor Group						<i>Coskullites sheltosi</i> Bose	Middle Maastrichtian	67.2	
							<i>Sphenodiscus intermedius</i> Bose	Lower Maastrichtian	70.4	
	Austin Group						<i>Nestoceras</i> (<i>Nestoceras</i>) <i>colubriformis</i> Stephenson	Upper Campanian	71.4	
							<i>Nestoceras</i> (<i>Nestoceras</i>) <i>draconis</i> Stephenson		71.4	
	Eagle Ford Group						<i>Mamabolites ricensis</i> Young	Middle Campanian	76.2	
							<i>Nestoceras</i> (<i>Bostrychoceras</i>) <i>polyplegum</i> Reemer		80.6	
	Woodbine Group						<i>Baculites mchearai</i> Landes	Lower Campanian	83.5	
							<i>Menabites</i> (<i>Delawarollis</i>) <i>sublaevis</i> (Young)	Upper Santonian	84.8	
	Washita Group						<i>Menabites</i> (<i>Delawarollis</i>) <i>delawarensis</i> (Morton)		86.6	
<i>Submertonoceras toquesquensis</i> Young		Upper Coniacian	87.3							
Fredericksburg Group	<i>Toxanites</i> (<i>Plesiotoxanites</i>) <i>chiloeensis</i> Young		88.7							
	<i>Toxanites</i> (<i>Toxanites</i>) <i>gallicus</i> Collignon	Upper Turonian	90.4							
Trinity Group	<i>Toxanites</i> (<i>Toxanites</i>) <i>texanus</i> (Reemer)		92.1							
	<i>Toxanites</i> (<i>Plesiotoxanites</i>) <i>stangeri densicostatus</i> Speth	Middle Turonian	93.4							
Washita Group	<i>Prionocyclus gabriellense</i> Young		94.7							
	<i>Prionocyclus</i> (<i>Prionocyclus</i>) <i>westphalicum</i> (Schluter)	Lower Turonian	96.0							
Fredericksburg Group	<i>Prionocyclus</i> (<i>Prionocyclus</i>) <i>hessi</i> Young		97.2							
	<i>Prionocyclus quadrales</i> Cobban	Upper Albian	103.4							
Trinity Group	<i>Scaphites whitfieldi</i> Cobban		108.1							
	<i>Prionocyclus wyomingensis</i> Mesk	Lower Albian	112							
Washita Group	<i>Prionocyclus macombi</i> Mesk		114							
	<i>Prionocyclus hyatti</i> (Stanton)	Upper Aptian	116							
Fredericksburg Group	<i>Colligatoceras woodliffi</i> (Mantell)		118							
	<i>Mammalis nodosoides</i> (Schluter)	Middle Aptian	124							
Washita Group	<i>Vasoceras</i> (<i>Greenhornoceras</i>) <i>birchbyi</i> Cobban and Scott		130							
	<i>Pseudaspidoceras flexuosum</i> Powell	Lower Aptian	136							
Trinity Group	<i>Nigericeras scotti</i> Cobban		141							
	<i>Neosartdoceras juddi</i> (Barrett and de Goores)	Barremian	141							
Fredericksburg Group	<i>Sciponoceras gracile</i> (Shumard)		141							
	<i>Metatoceras moobyense</i> Cobban	Austrian	141							
Washita Group	<i>Glyptoceras</i> (<i>Proeglyptoceras</i>) <i>canisaurum</i> (Haas)		141							
	<i>Plesiacanthoceras wyomingense</i> Cobban Atakokian	Austrian	141							
Trinity Group	<i>Acanthoceras amphibolium</i> (Morrow)		141							
	<i>Acanthoceras holense</i> Adkins	Austrian	141							
Fredericksburg Group	<i>Ceniloceras tarantense</i> (Adkins)		141							
	<i>Ferbeceras brandrettii</i> (Young)	Austrian	141							
Washita Group	<i>Acompsoceras inconstans</i> (Schluter)		141							
	<i>Budaiceras hyatti</i> (Skattuck)	Austrian	141							
Trinity Group	<i>Graysonites fozi</i> Young		141							
	<i>Graysonites adkinsi</i> Young	Austrian	141							
Fredericksburg Group	<i>Mariella</i> (<i>Wiletonia</i>) <i>braxtonensis</i> (Reemer)		141							
	<i>Mertonoceras</i> (<i>Angolaites</i>) <i>drahei</i> (Young)	Austrian	141							
Washita Group	<i>Mertonoceras</i> (<i>Angolaites</i>) <i>wintasi</i> (Adkins)		141							
	<i>Mertonoceras</i> (<i>Angolaites</i>) <i>lasswitsi</i> (Young)	Austrian	141							
Trinity Group	<i>Mertonoceras</i> (<i>Angolaites</i>) <i>equidistans</i> (Cragin)		141							
	<i>Eopachyliscus marciannus</i> (Shumard)	Austrian	141							
Fredericksburg Group	<i>Craginites serratuscens</i> (Cragin)		141							
	<i>Adkinsites bravoensis</i> (Bose)	Austrian	141							
Washita Group	<i>Oxytropidoceras</i> (<i>Oxytropidoceras</i>) <i>powelli</i> (Young)		141							
	<i>Oxytropidoceras</i> (<i>Oxytropidoceras</i>) <i>carbonarium</i> (Gabb)	Austrian	141							
Trinity Group	<i>Oxytropidoceras</i> (<i>Mirapelle</i>) <i>salsi</i> (Young)		141							
	<i>Egonoceras hilli</i> Rohm	Austrian	141							
Fredericksburg Group	<i>Egonoceras</i> sp.		141							
	<i>Hypacanthophiles comalensis</i> (Scott)	Austrian	141							
Washita Group	<i>Douvilleroceras mammillatum</i> (Schlottheim)		141							
	<i>Hypacanthophiles cragii</i> Scott	Austrian	141							
Trinity Group	<i>Kozakskyella spathi</i> (Steganyow)		141							
	<i>Dufrenoyia justinae</i> (Hill)	Austrian	141							
Fredericksburg Group	<i>Dufrenoyia rebecca</i> Young		141							
	No Ammonites Found	Austrian	141							
Ammonites Found But Not Specified	141									
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							
Trinity Group		Austrian	141							
			141							
Fredericksburg Group		Austrian	141							
			141							
Washita Group		Austrian	141							
			141							







MIDDLETOWN WELL
BUTLER CO., OH.



E. CANADA & NOWADAGA
CREEKS, N.Y.

