

# **A captorhinid-dominated assemblage from the palaeoequatorial Permian of Menorca (Balearic Islands, western Mediterranean)**

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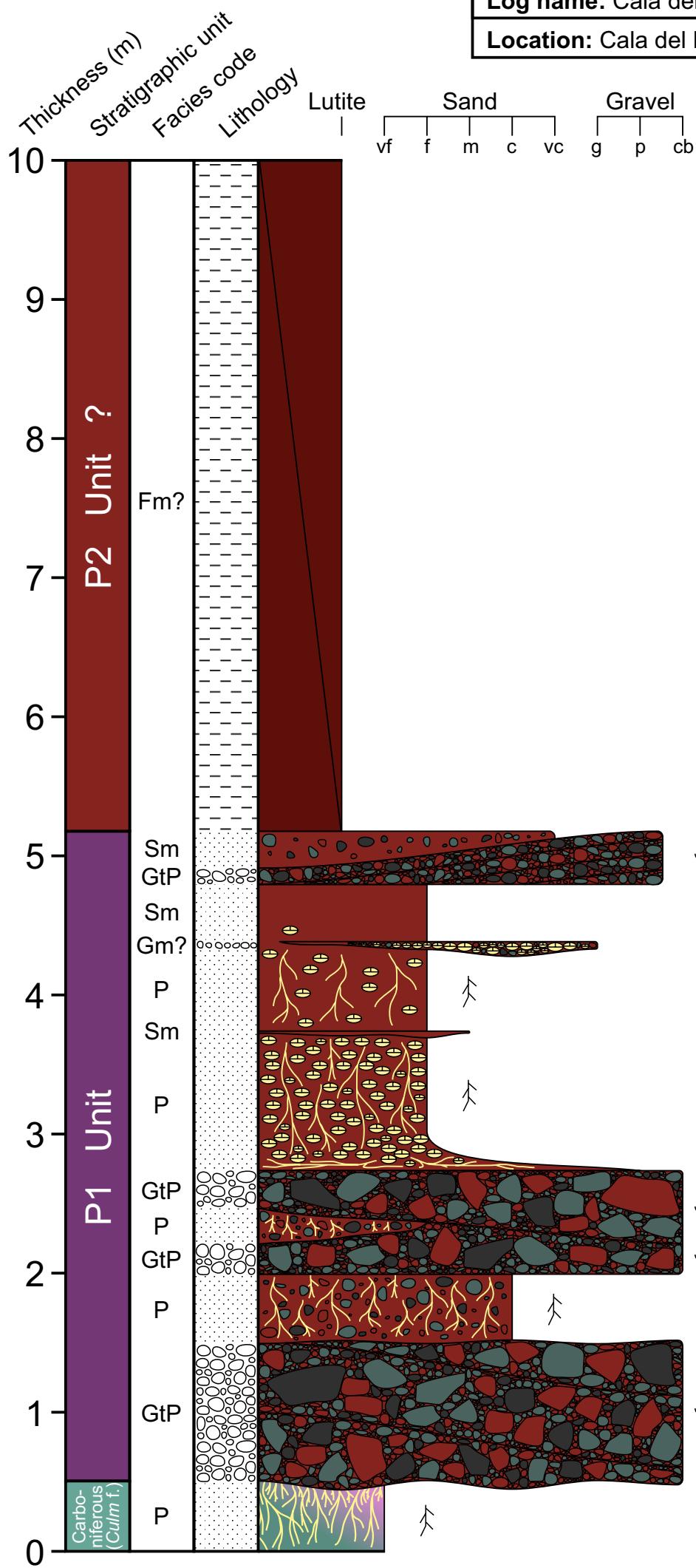
<sup>5</sup> Museu de la Conca Dellà. Carrer del Museu 4. 25650, Isona i Conca Dellà. Lleida, Catalunya, Spain.

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**Supplementary Table 1.** Lithofacies of Cala del Pilar–Pla de Mar section.

Code	Lithofacies	Sedimentary structures, processes and fossil content
Gt	Stratified, matrix to clast-supported, gravel to pebble-sized breccia (with rounded clasts and rhizocretion fragments) of reworked calcretes and intraformational clasts, and rarely extraformational clasts and tetrapod bones (as clasts).	Crude trough stratification. Usually not graded or imbricated. Sometimes with soft pebbles. It corresponds to 3D megaripples that rework the floodplain and levee palaeosols during sudden floods, or the basal lags of larger channels (Gómez-Gras & Alonso-Zarza, 2003). It sometimes contains tetrapod bones and bone fragments.
Gm	Massive, matrix to clast-supported, gravel to pebble-sized breccia (with rounded clasts and rhizocretion fragments) of reworked calcretes and intraformational clasts, and rarely extraformational clasts and tetrapod bones (as clasts).	Massive. Usually not graded or imbricated. Sometimes with soft pebbles. It corresponds to 3D megaripples that rework the floodplain and levee palaeosols during sudden floods, or the basal lags of larger channels (Gómez-Gras & Alonso-Zarza, 2003). It sometimes contains tetrapod bones and bone fragments.
GmP	Stratified, clast-supported, pebble to cobble-sized breccia (with occasionally rounded clasts) of extraformational clasts.	Crude trough stratification. Not graded or imbricated. Large rhizocretions. It corresponds to high density flows near the footwall scarp of the basin, mixing autochthonous and allochthonous clasts (Gómez-Gras & Alonso-Zarza, 2003). It usually contains large rhizocretions.
St	Stratified, very fine to very coarse-grained sands.	Trough cross stratification. Sometimes with soft pebbles. It corresponds to sinuous or linguoid 3D megaripples of lower flow regime (Miall, 1985, 2006).
Sp	Stratified, medium-grained sands.	Planar cross stratification. It corresponds to transverse 2D megaripples of lower flow regime (Miall, 1985, 2006).
Sr	Stratified, very fine to medium-grained sands.	Ripple-marks, mostly climbing ripples. Sometimes convolute lamination. It corresponds to low regime flows, usually at the top of channel sequences or at crevasse splays (Miall, 1985). They can be affected by rapid suspension fall-out, thus generating water-escaping structures.
Sh	Stratified, very fine to fine-grained sands.	Horizontal stratification and lamination. It corresponds to planar bed flow of lower flow regime (Miall, 1985, Postma, 1990).
Sl	Stratified, very fine to fine-grained sands.	Low-angle cross stratification. Sometimes convolute lamination. It corresponds to crevasse splays (Miall, 1985).
Sm	Massive, very fine to very coarse-grained sands.	Massive. Sometimes soft pebbles. It corresponds to either sediment gravity flows or to heavily bioturbated sediments (Miall, 2006).
Sb	Massive to crudely stratified, very fine to medium-grained sands with bioturbation.	Lamination (almost) obliterated by roots or invertebrate burrows. It corresponds to the reworking of sand-sheet or overbank deposits (Linol <i>et al.</i> , 2009). The fossils present in this lithofacies are rhizocretions and bioturbation of the <i>Scyenia</i> ichnofacies, including tetrapod footprints.
Fl	Laminated lutites.	Fine lamination, either horizontal, low angle or ripple lamination. It corresponds to overbank, abandoned channel or waning flood deposits (Miall, 2006).
Fm	Massive lutites.	Massive, sometimes with disperse clasts. Gleyed patches are usual. It corresponds to overbank, abandoned channel or drape deposits (Postma, 1990; Miall, 2006).
Fr	Massive lutites with root traces.	Numerous root traces. It corresponds to settled sediments and incipient palaeosols (Bercovici <i>et al.</i> , 2009).
Fb	Massive lutites with bioturbation.	Numerous invertebrate burrows ( <i>Scyenia</i> ichnofacies). It corresponds to the reworking of other lutitic lithofacies.
P	Lutites or sandstones with any lamination, with abundance of carbonate nodules, locally forming crusts.	Massive to laminated. Very abundant carbonate nodules, root traces and gleyed patches usual. It corresponds to palaeosols (Mack <i>et al.</i> , 1993; Gómez-Gras & Alonso-Zarza, 2003; Bercovici <i>et al.</i> , 2009).

**Supplementary Logs (following pages).** Detailed log of Cala del Pilar–Pla de Mar section (1:40 scale).

**Lithology**

- [Dashed pattern] Lutite
- [Grey dotted pattern] Sandstone
- [Circles with dots pattern] Conglomerate
- [Diagonal lines pattern] Semi-covered interval
- [X pattern] Covered interval

**Grain size**

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

**Sedimentary structures**

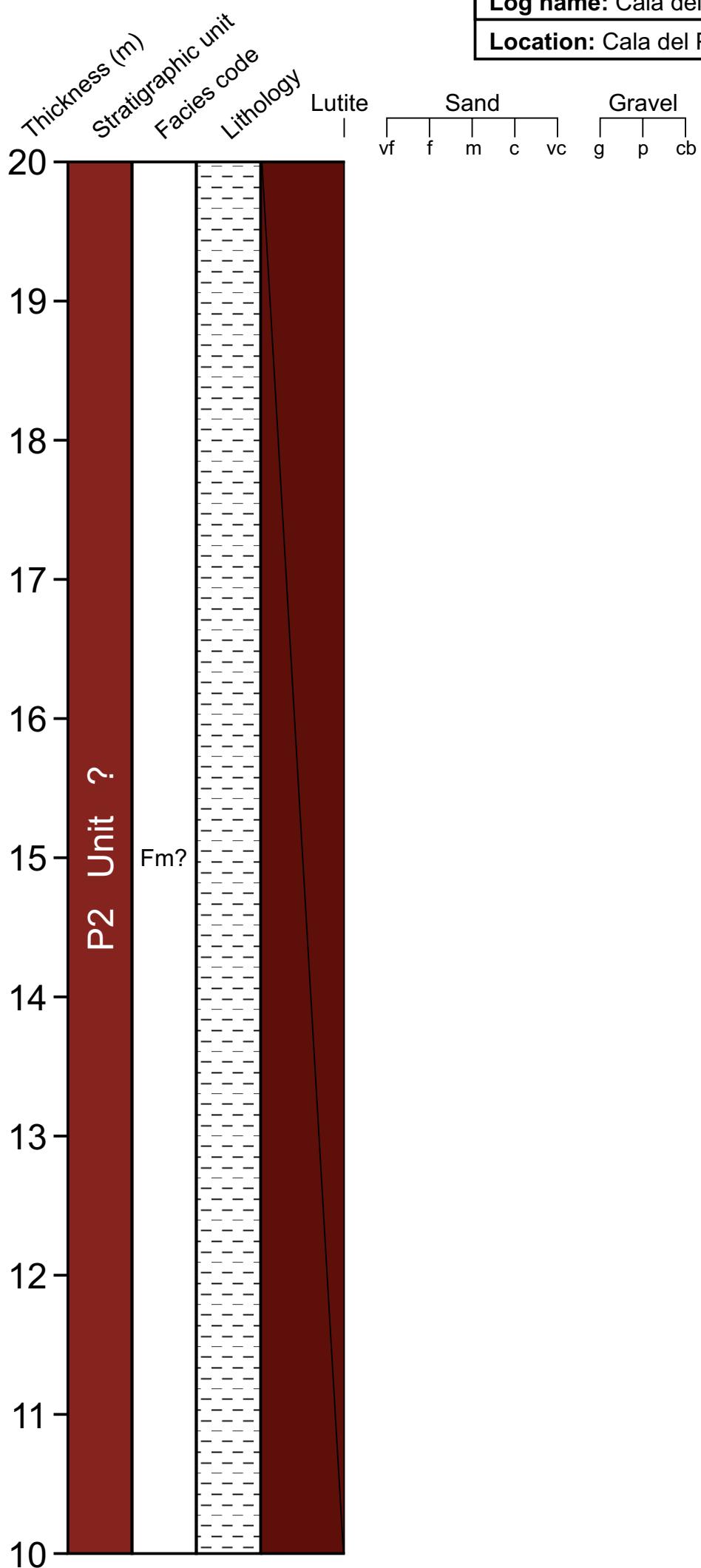
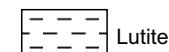
- [Parallel lines] Parallel lamination
- [Ripple marks] Ripple lamination
- [Convolute lines] Convoluted lamination
- [Tabular cross] Tabular cross stratification
- [Trough cross] Trough cross stratification
- [Wavy lines] Mud cracks
- [Soft pebbles] Soft pebbles
- [Carbonate nodules] Carbonate nodules
- [Positive granoselection] Positive granoselection

**Trace and body fossils**

- [Roots] Rhizocretions
- [Leaves] Plant remains
- [Logs] Plant debris / Coal
- [Logs] Tree logs
- [Microflora symbol] Microflora
- [Burrow symbol] Burrows
- [Invertebrate tracks] Invertebrate tracks
- [Hand] Tetrapod tracks
- [Bone] Bones and bone fragments

**Other symbols**

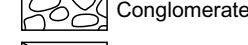
- [Arrow pointing right] Fault
- [X with diagonal lines] 188/42 Strike/dip angle
- [X with crosses] Abandoned copper mine

**Lithology**

Lutite



Sandstone



Conglomerate



Semi-covered interval



Covered interval

**Grain size**

- vf Very fine-grained sandstone
- f Fine-grained sandstone
- m Medium-grained sandstone
- c Coarse-grained sandstone
- vc Very coarse-grained sandstone
- g Gravel
- p Pebble
- cb Cobble

**Sedimentary structures**

- ☰ Parallel lamination
- ↗ Ripple lamination
- 〽 Convolute lamination
- ↖ Tabular cross stratification
- ↙ Trough cross stratification
- ~~~~ Mud cracks
- Soft pebbles
- Carbonate nodules
- Positive granoselection

**Trace and body fossils**

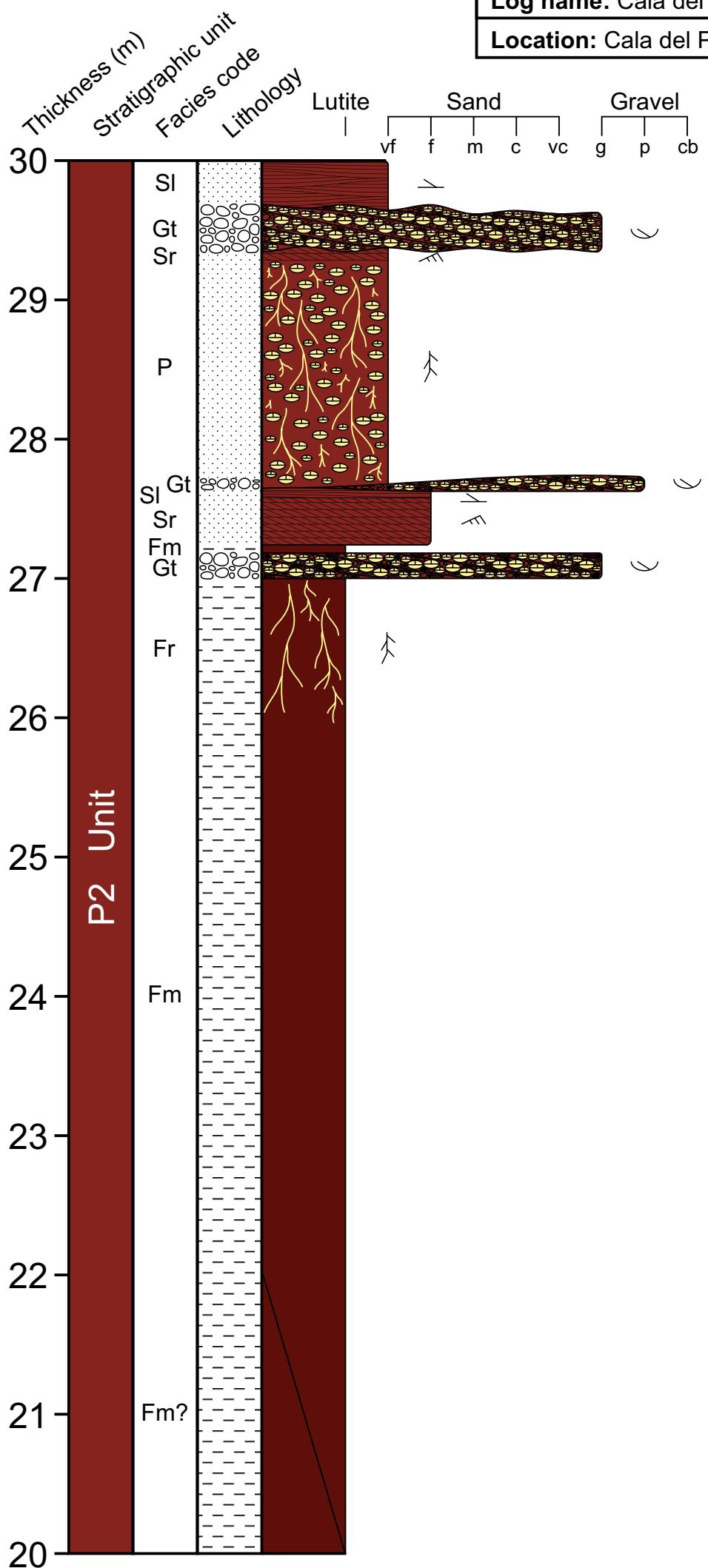
- ↑ Rhizocretions
- ↑ Plant remains
- ↑ Plant debris / Coal
- ↑ Tree logs
- △ Microflora
- ↑ Burrows
- ↑ Invertebrate tracks
- ↑ Tetrapod tracks
- ↑ Bones and bone fragments

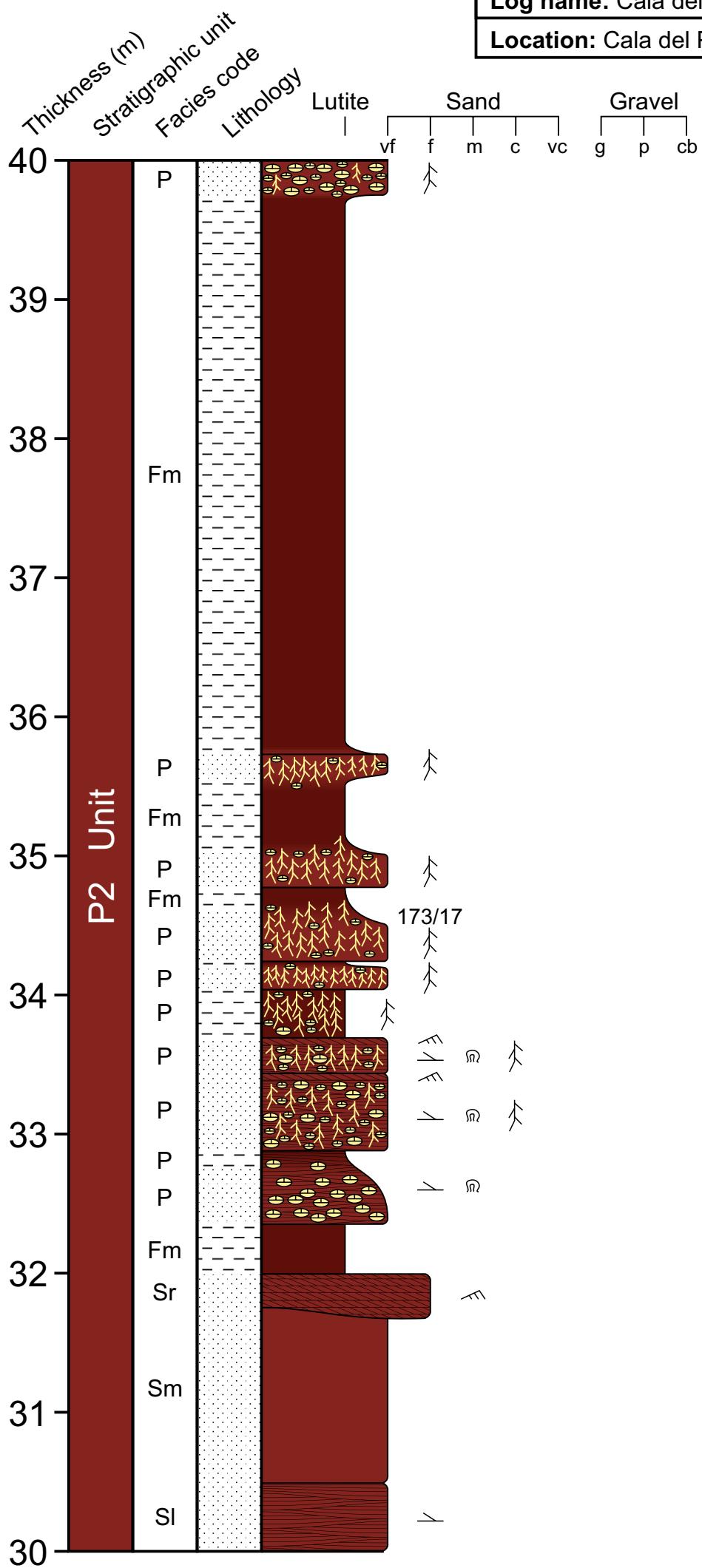
**Other symbols**

188/42 Strike/dip angle



Abandoned copper mine



**Lithology**

- [Dashed pattern] Lutite
- [Dotted pattern] Sandstone
- [Circles with diagonal lines] Conglomerate
- [Cross-hatch] Semi-covered interval
- [X-hatch] Covered interval

**Grain size**

- vf Very fine-grained sandstone
- f Fine-grained sandstone
- m Medium-grained sandstone
- c Coarse-grained sandstone
- vc Very coarse-grained sandstone
- g Gravel
- p Pebble
- cb Cobble

**Sedimentary structures**

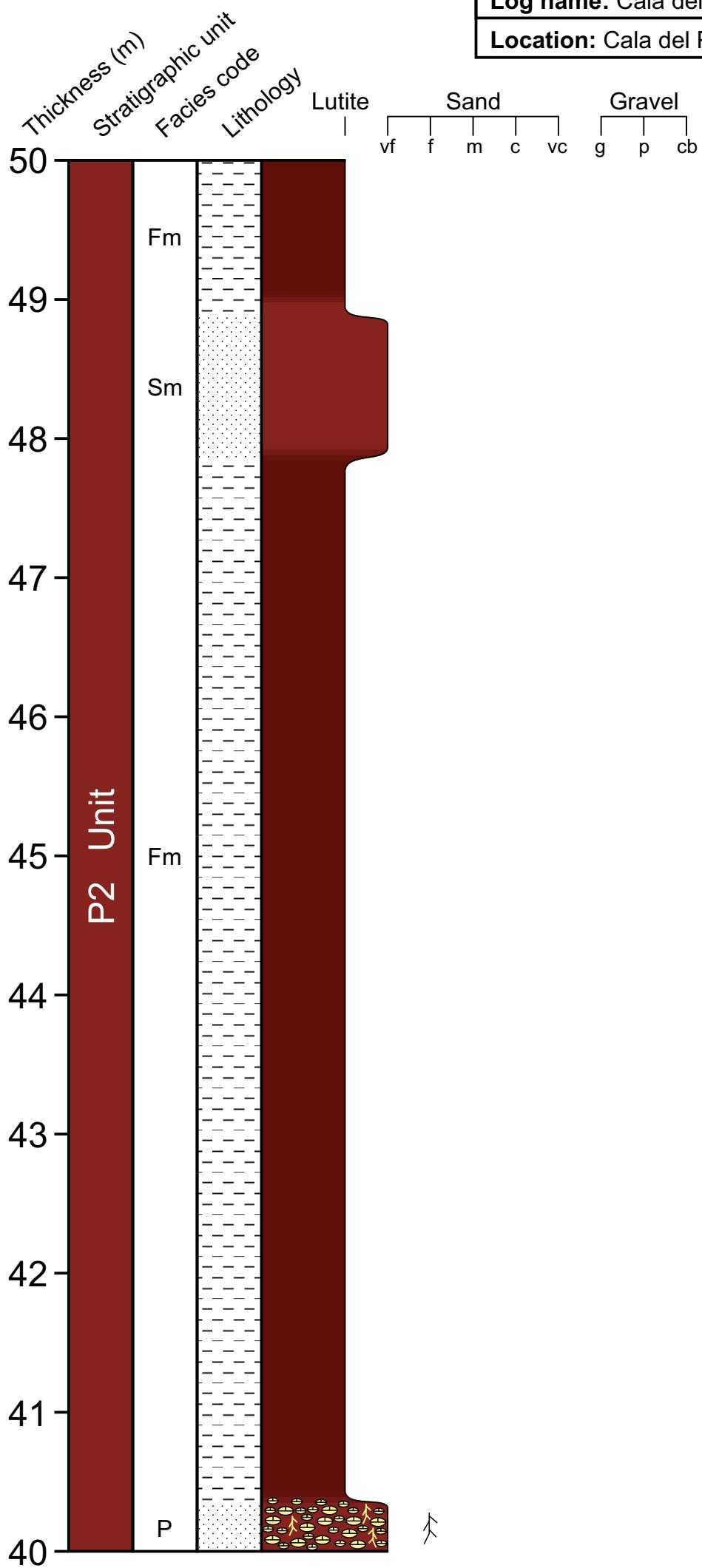
- [Parallel lines] Parallel lamination
- [Ripple marks] Ripple lamination
- [Convolute lines] Convoluted lamination
- [Tabular] Tabular cross stratification
- [Trough] Trough cross stratification
- [Wavy lines] Mud cracks
- [Soft pebbles] Soft pebbles
- [Carbonate nodules] Carbonate nodules
- [Positive granoselection] Positive granoselection

**Trace and body fossils**

- [Rhizocretions] Rhizocretions
- [Plant leaf] Plant remains
- [Plant leaf] Plant debris / Coal
- [Tree log] Tree logs
- [Microflora] Microflora
- [Burrow] Burrows
- [Invertebrate tracks] Invertebrate tracks
- [Tetrapod tracks] Tetrapod tracks
- [Bone] Bones and bone fragments

**Other symbols**

- [Fault symbol] Fault
- [Strike/dip angle symbol] 188/42 Strike/dip angle
- [Abandoned copper mine symbol] Abandoned copper mine

**Lithology**

- [Dashed pattern] Lutite
- [Dotted pattern] Sandstone
- [Circles with dots] Conglomerate
- [Diagonal lines] Semi-covered interval
- [X pattern] Covered interval

**Grain size**

- vf Very fine-grained sandstone
- f Fine-grained sandstone
- m Medium-grained sandstone
- c Coarse-grained sandstone
- vc Very coarse-grained sandstone
- g Gravel
- p Pebble
- cb Cobble

**Sedimentary structures**

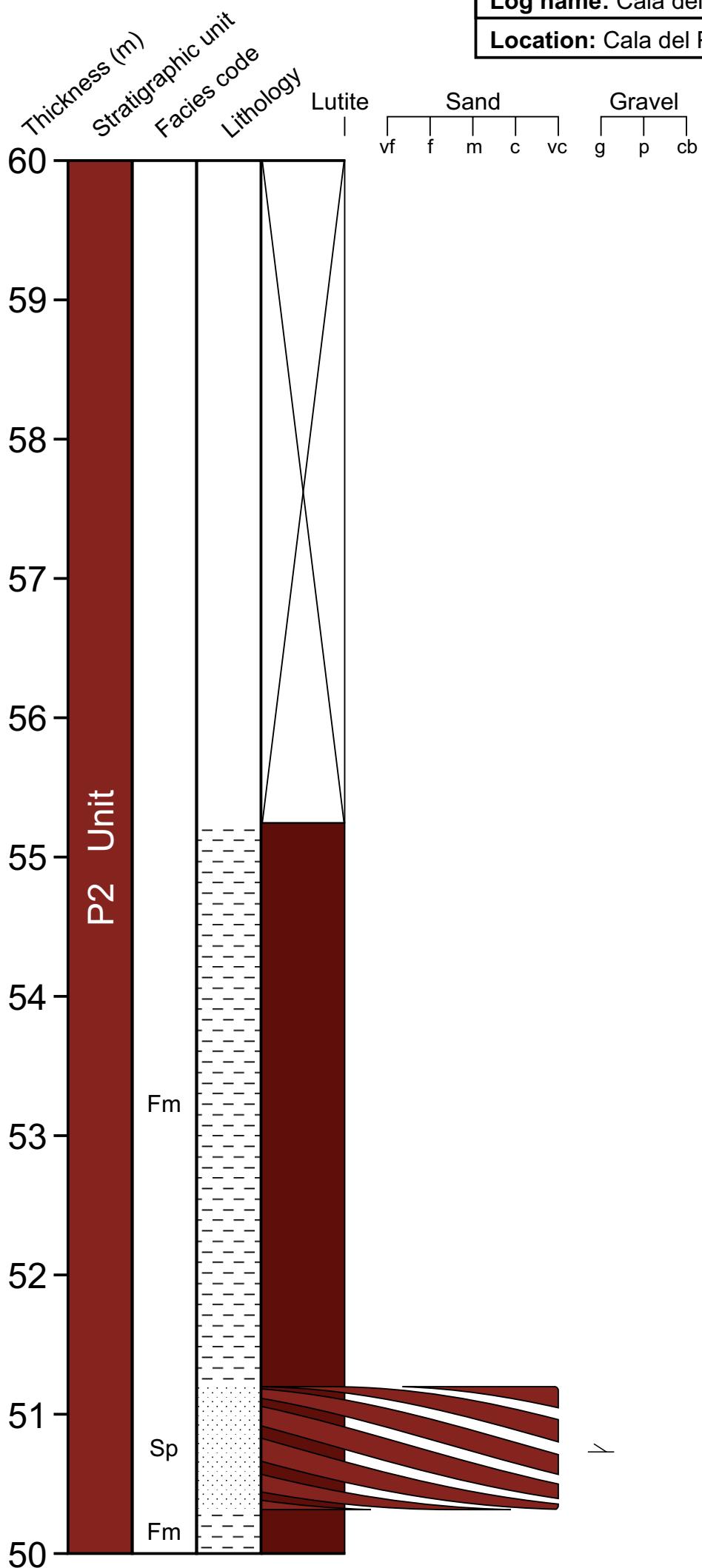
- [Three parallel lines] Parallel lamination
- [Ripple marks] Ripple lamination
- [Convolute lamination symbol] Convolute lamination
- [Tabular cross stratification symbol] Tabular cross stratification
- [Trough cross stratification symbol] Trough cross stratification
- [Wavy lines] Mud cracks
- [Soft pebbles symbol] Soft pebbles
- [Carbonate nodules symbol] Carbonate nodules
- [Positive granoselection symbol] Positive granoselection

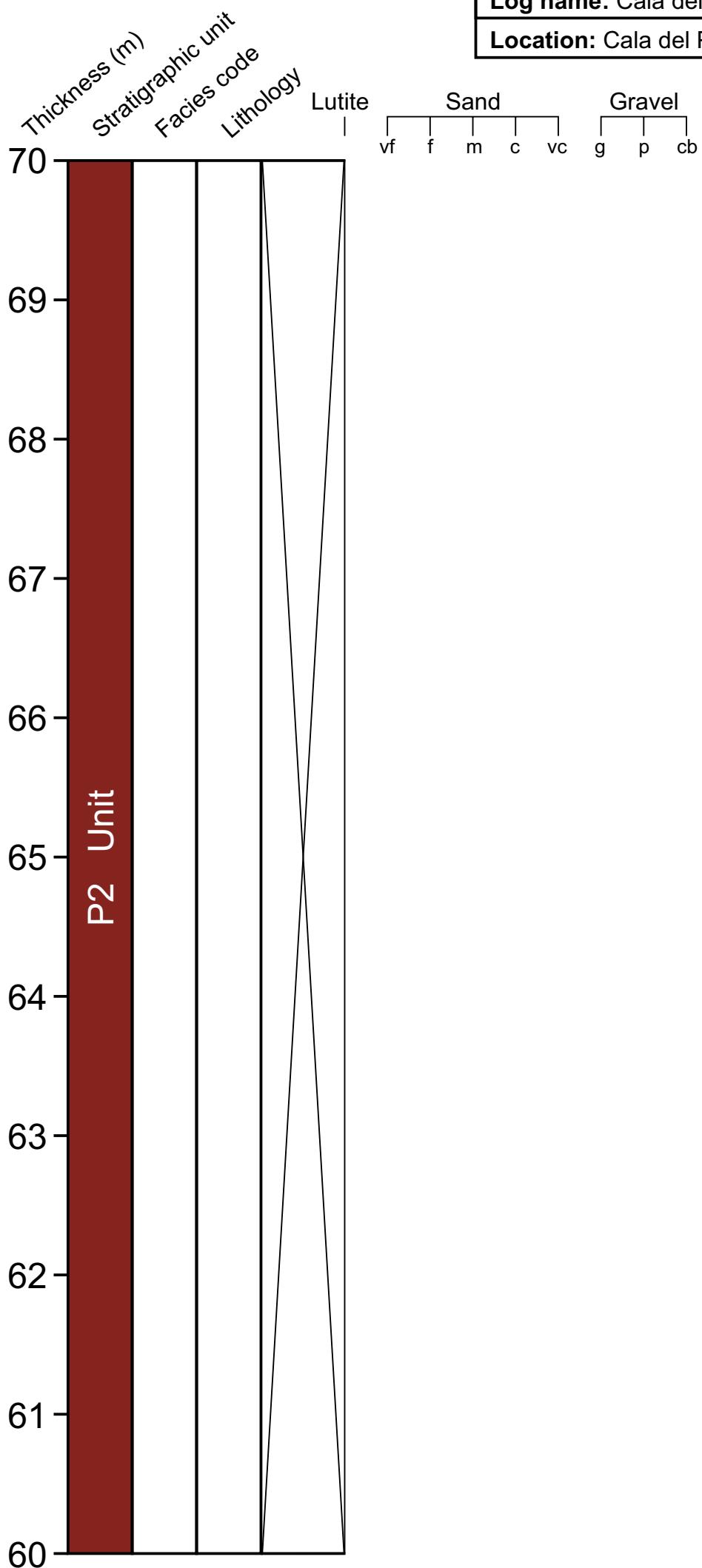
**Trace and body fossils**

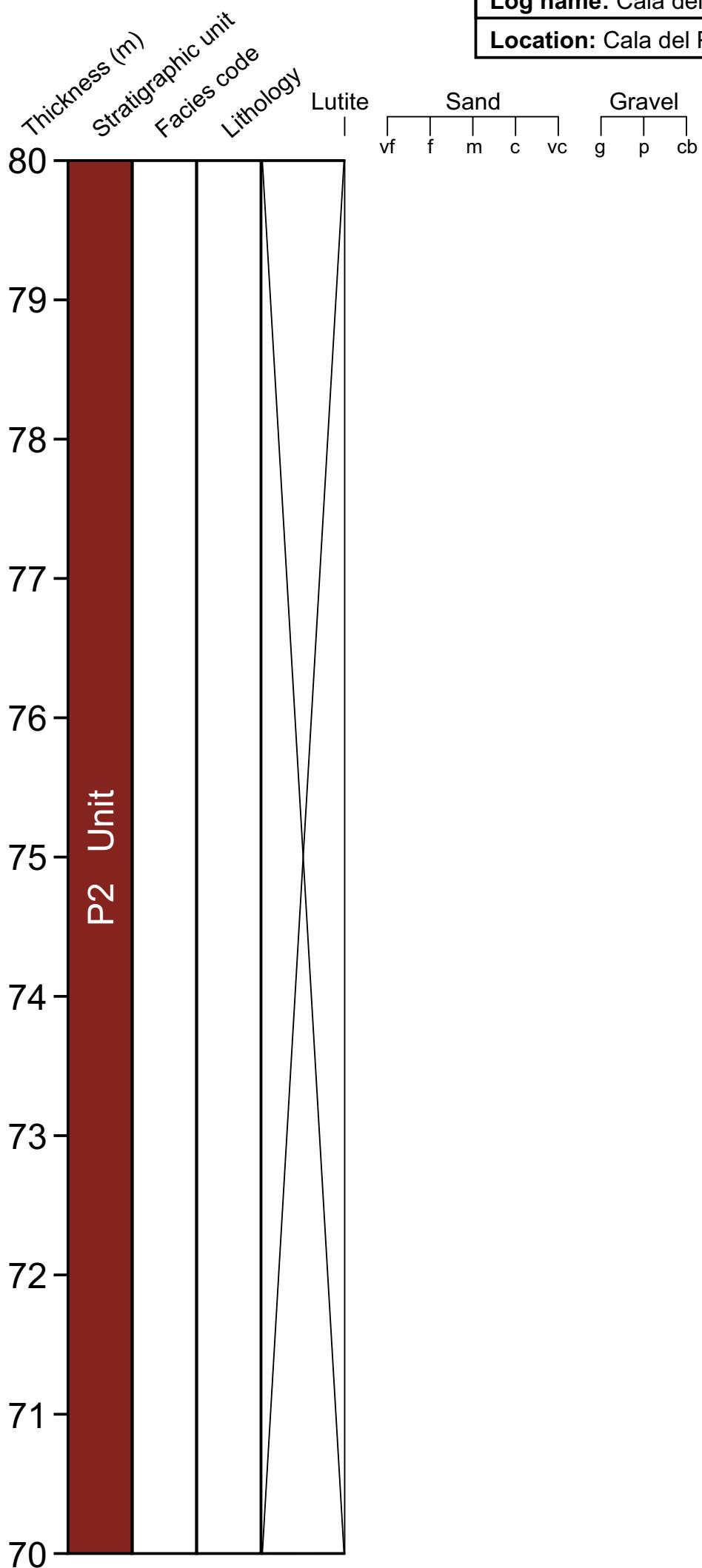
- [Root symbol] Rhizocretions
- [Leaf symbol] Plant remains
- [Coal symbol] Plant debris / Coal
- [Tree log symbol] Tree logs
- [Microflora symbol] Microflora
- [Burrow symbol] Burrows
- [Invertebrate tracks symbol] Invertebrate tracks
- [Tetrapod tracks symbol] Tetrapod tracks
- [Bone symbol] Bones and bone fragments

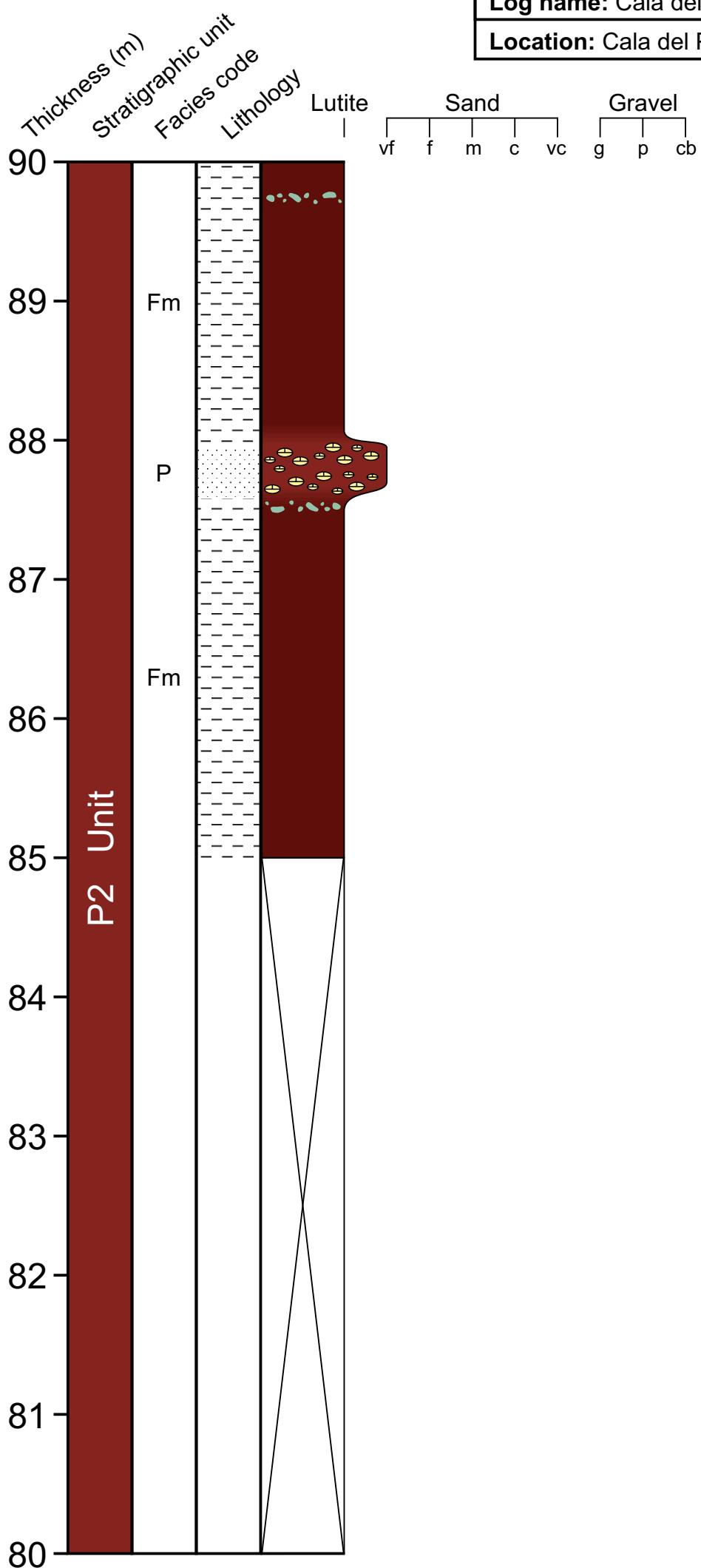
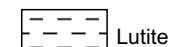
**Other symbols**

- [Arrow symbol] Fault
- 188/42 Strike/dip angle
- [X symbol] Abandoned copper mine

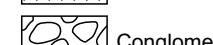




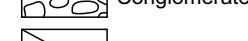


**Lithology**

Lutite



Sandstone



Conglomerate



Semi-covered interval



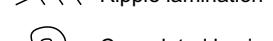
Covered interval

**Grain size**

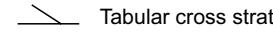
<b>vf</b>	Very fine-grained sandstone
<b>f</b>	Fine-grained sandstone
<b>m</b>	Medium-grained sandstone
<b>c</b>	Coarse-grained sandstone
<b>vc</b>	Very coarse-grained sandstone
<b>g</b>	Gravel
<b>p</b>	Pebble
<b>cb</b>	Cobble

**Sedimentary structures**

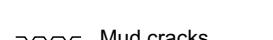
Parallel lamination



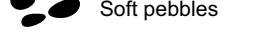
Ripple lamination



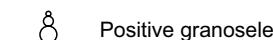
Convoluted lamination



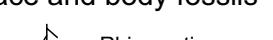
Tabular cross stratification



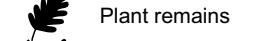
Trough cross stratification



Mud cracks



Soft pebbles



Carbonate nodules



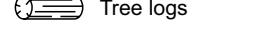
Positive granoselection

**Trace and body fossils**

Rhizocretions



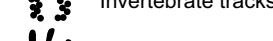
Plant remains



Plant debris / Coal



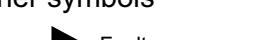
Tree logs



Microflora



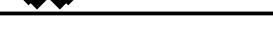
Burrows



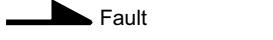
Invertebrate tracks



Tetrapod tracks



Bones and bone fragments

**Other symbols**

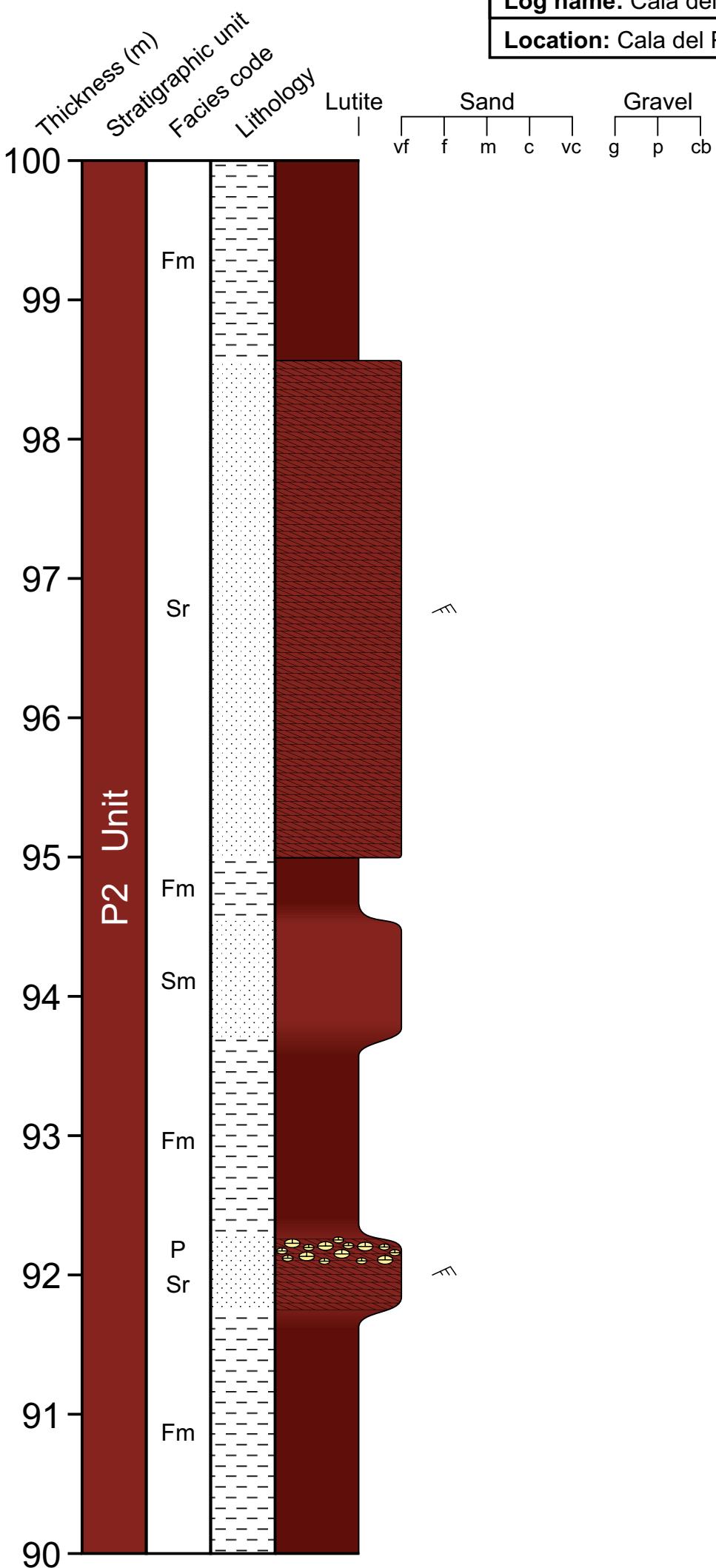
Fault



188/42 Strike/dip angle



Abandoned copper mine

**Lithology**

- [Dashed pattern] Lutite
- [Dotted pattern] Sandstone
- [Circles with dots] Conglomerate
- [Diagonal lines] Semi-covered interval
- [X pattern] Covered interval

**Grain size**

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

**Sedimentary structures**

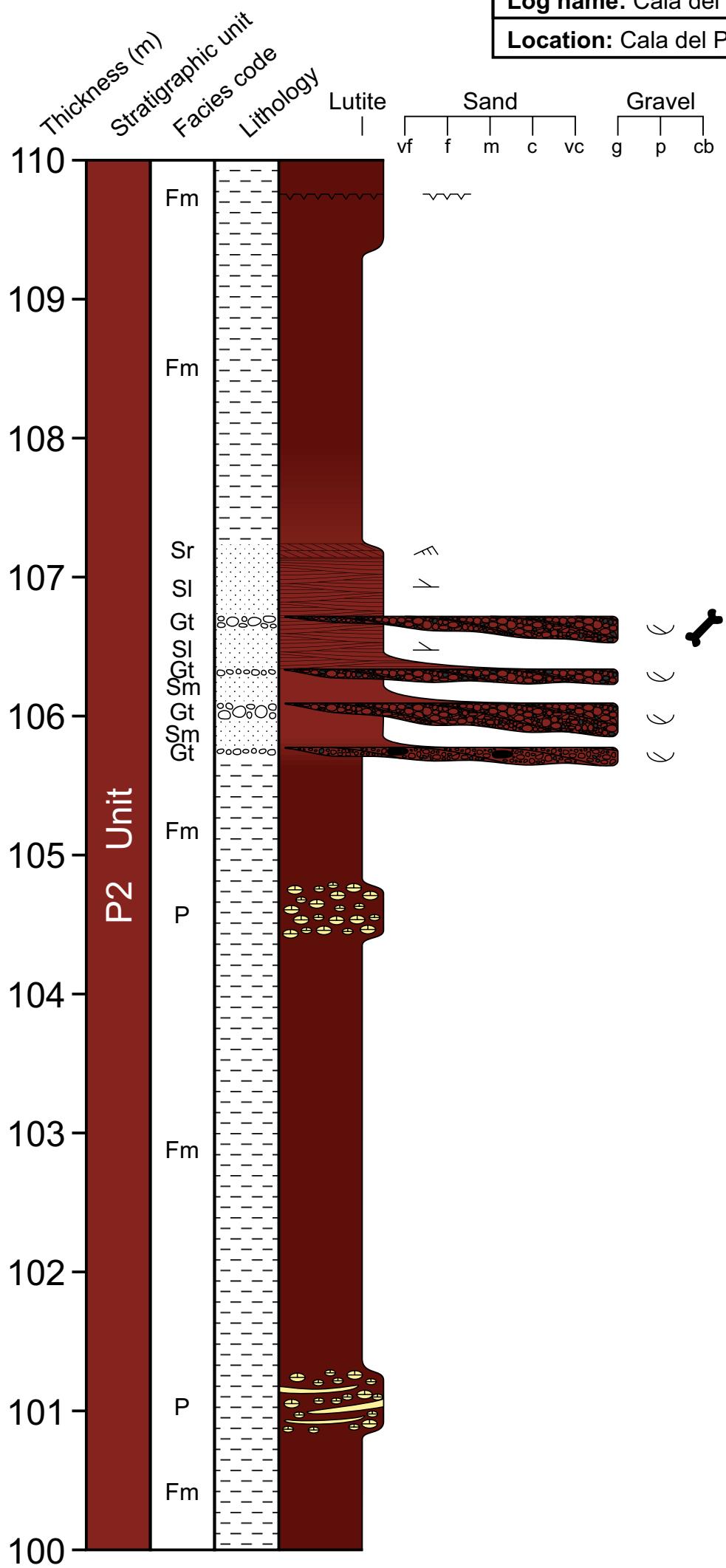
- [Horizontal lines] Parallel lamination
- [Wavy lines] Ripple lamination
- [Curly lines] Convoluted lamination
- [Diagonal lines] Tabular cross stratification
- [Concave lines] Trough cross stratification
- [Wavy lines with dots] Mud cracks
- [Black ovals] Soft pebbles
- [White circles with black outlines] Carbonate nodules
- [Open circle] Positive granoselection

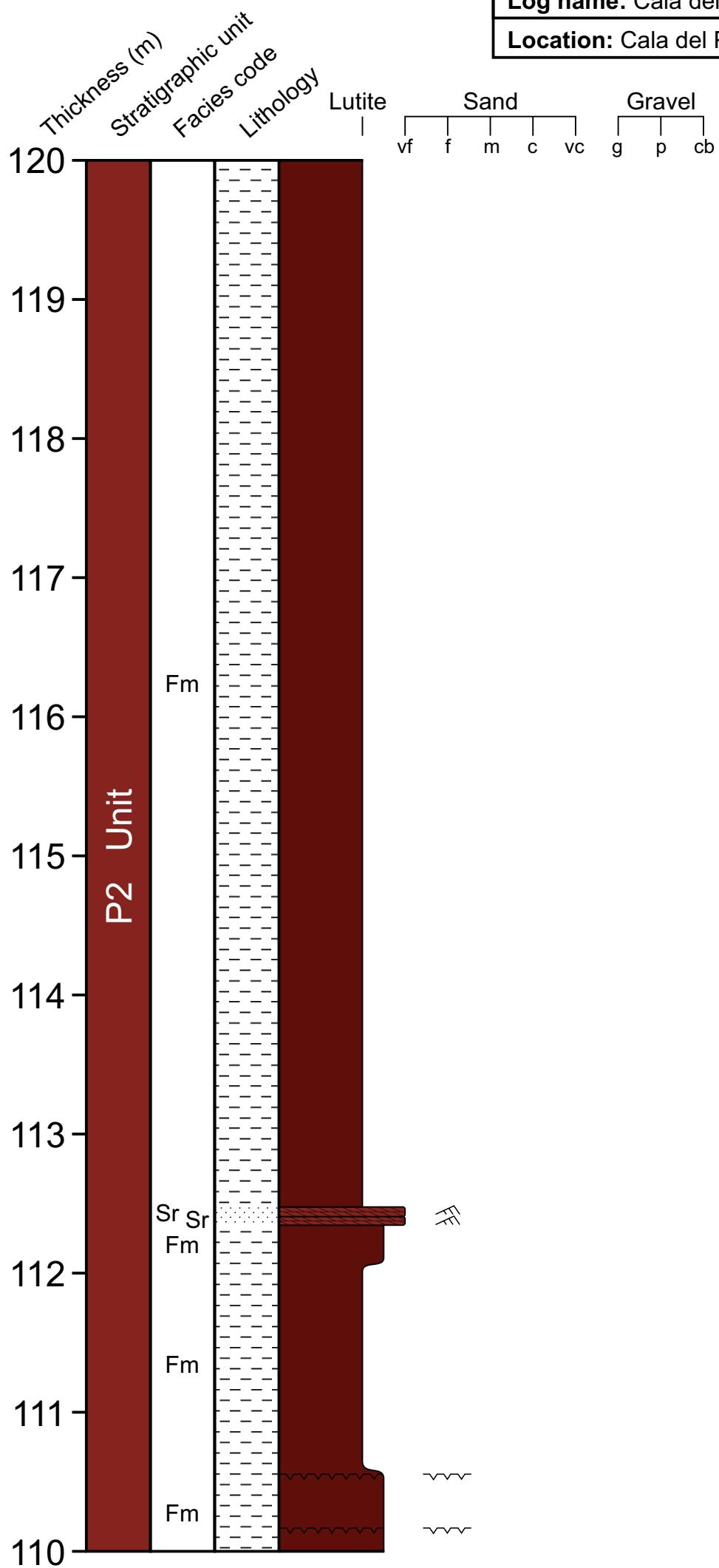
**Trace and body fossils**

- [Stick figure] Rhizocretions
- [Leaf] Plant remains
- [Leaf] Plant debris / Coal
- [Logs] Tree logs
- [Triangle] Microflora
- [Burrows] Burrows
- [Invertebrate tracks]
- [Hand] Tetrapod tracks
- [Bone] Bones and bone fragments

**Other symbols**

- [Arrow] Fault
- 188/42 Strike/dip angle
- [X pattern] Abandoned copper mine



**Lithology**

- [Dashed box] Lutite
- [Dotted box] Sandstone
- [Circles with dots] Conglomerate
- [Diagonal lines] Semi-covered interval
- [X's] Covered interval

**Grain size**

- vf** Very fine-grained sandstone
- f** Fine-grained sandstone
- m** Medium-grained sandstone
- c** Coarse-grained sandstone
- VC** Very coarse-grained sandstone
- g** Gravel
- p** Pebble
- cb** Cobble

**Sedimentary structures**

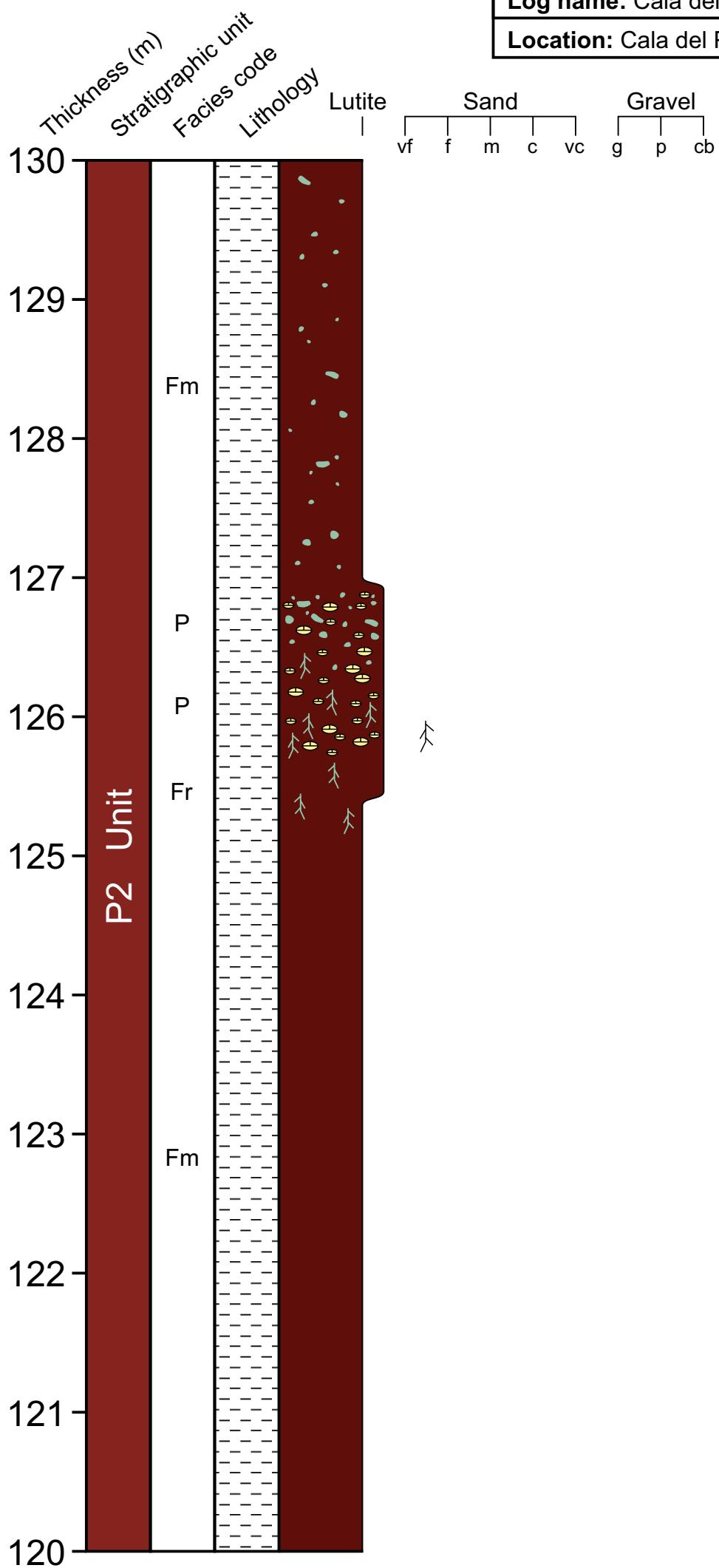
- [Three parallel lines] Parallel lamination
- [Ripple marks] Ripple lamination
- [Convolute lamination symbol] Convoluted lamination
- [Tabular cross stratification symbol] Tabular cross stratification
- [Trough cross stratification symbol] Trough cross stratification
- [Wavy lines] Mud cracks
- [Soft pebbles symbol] Soft pebbles
- [Carbonate nodules symbol] Carbonate nodules
- [Positive granoselection symbol] Positive granoselection

**Trace and body fossils**

- [Root symbol] Rhizocretions
- [Leaf symbol] Plant remains
- [Leaf symbol] Plant debris / Coal
- [Tree log symbol] Tree logs
- [Microflora symbol] Microflora
- [Burrow symbol] Burrows
- [Invertebrate tracks symbol] Invertebrate tracks
- [Tetrapod tracks symbol] Tetrapod tracks
- [Bone symbol] Bones and bone fragments

**Other symbols**

- [Arrow pointing right] Fault
- 188/42** Strike/dip angle
- [X's] Abandoned copper mine

**Lithology**

- [Dashed pattern] Lutite
- [Dotted pattern] Sandstone
- [Circles with dots] Conglomerate
- [Diagonal lines] Semi-covered interval
- [X pattern] Covered interval

**Grain size**

- |           |                               |
|-----------|-------------------------------|
| <b>vf</b> | Very fine-grained sandstone   |
| <b>f</b>  | Fine-grained sandstone        |
| <b>m</b>  | Medium-grained sandstone      |
| <b>c</b>  | Coarse-grained sandstone      |
| <b>vc</b> | Very coarse-grained sandstone |
| <b>g</b>  | Gravel                        |
| <b>p</b>  | Pebble                        |
| <b>cb</b> | Cobble                        |

**Sedimentary structures**

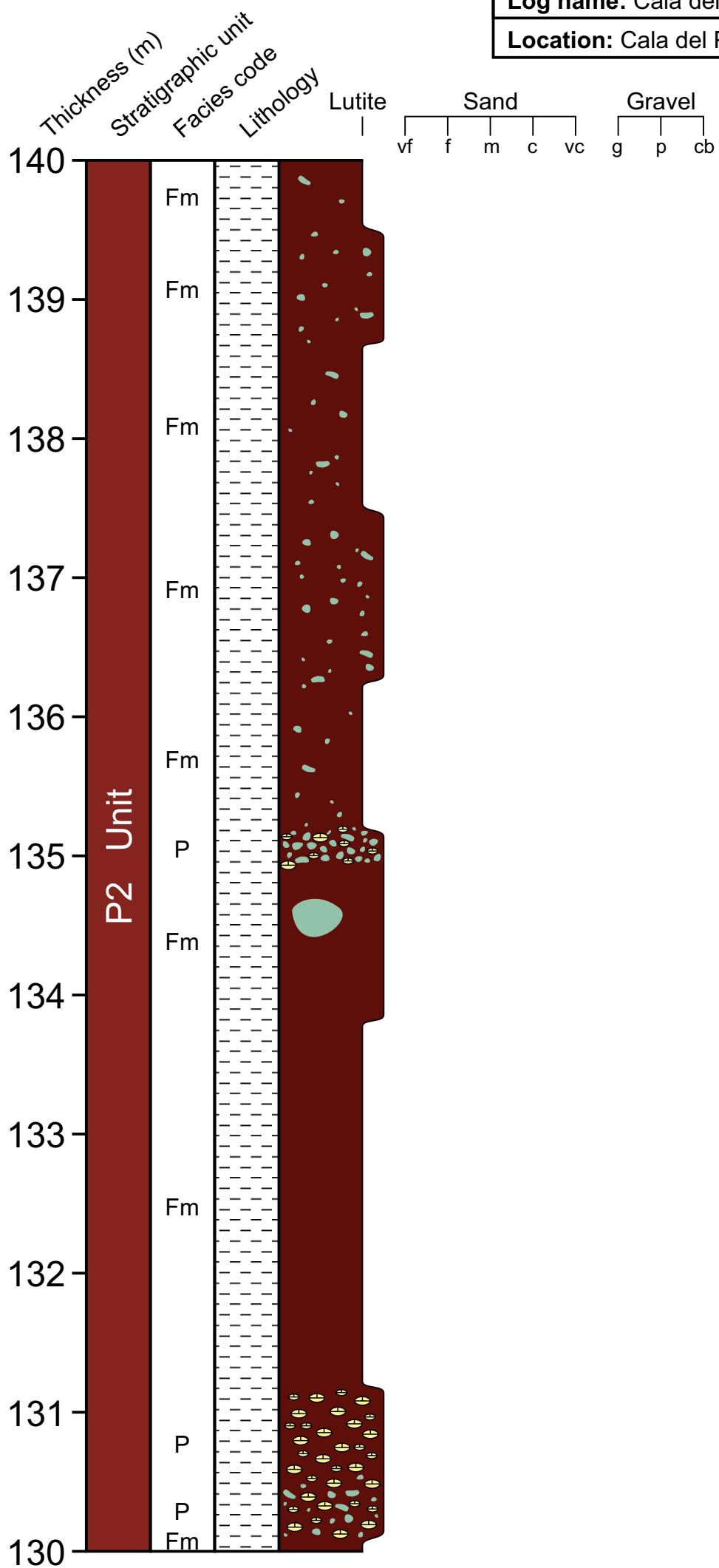
- [Parallel lines] Parallel lamination
- [Ripple marks] Ripple lamination
- [Convolute lines] Convoluted lamination
- [Tabular cross lines] Tabular cross stratification
- [Trough cross lines] Trough cross stratification
- [Wavy lines] Mud cracks
- [Soft pebbles] Soft pebbles
- [Carbonate nodules] Carbonate nodules
- [Positive granoselection symbol] Positive granoselection

**Trace and body fossils**

- [Root symbol] Rhizocretions
- [Leaf symbol] Plant remains
- [Leaf symbol] Plant debris / Coal
- [Tree log symbol] Tree logs
- [Microflora symbol] Microflora
- [Burrow symbol] Burrows
- [Invertebrate tracks symbol] Invertebrate tracks
- [Tetrapod tracks symbol] Tetrapod tracks
- [Bone symbol] Bones and bone fragments

**Other symbols**

- [Fault symbol] Fault
- [Strike/dip angle symbol] 188/42 Strike/dip angle
- [Abandoned copper mine symbol] Abandoned copper mine

**Lithology**

- [Dashed lines] Lutite
- [Dots] Sandstone
- [Circles] Conglomerate
- [Diagonal lines] Semi-covered interval
- [X's] Covered interval

**Grain size**

- vf Very fine-grained sandstone
- f Fine-grained sandstone
- m Medium-grained sandstone
- c Coarse-grained sandstone
- VC Very coarse-grained sandstone
- g Gravel
- p Pebble
- cb Cobble

**Sedimentary structures**

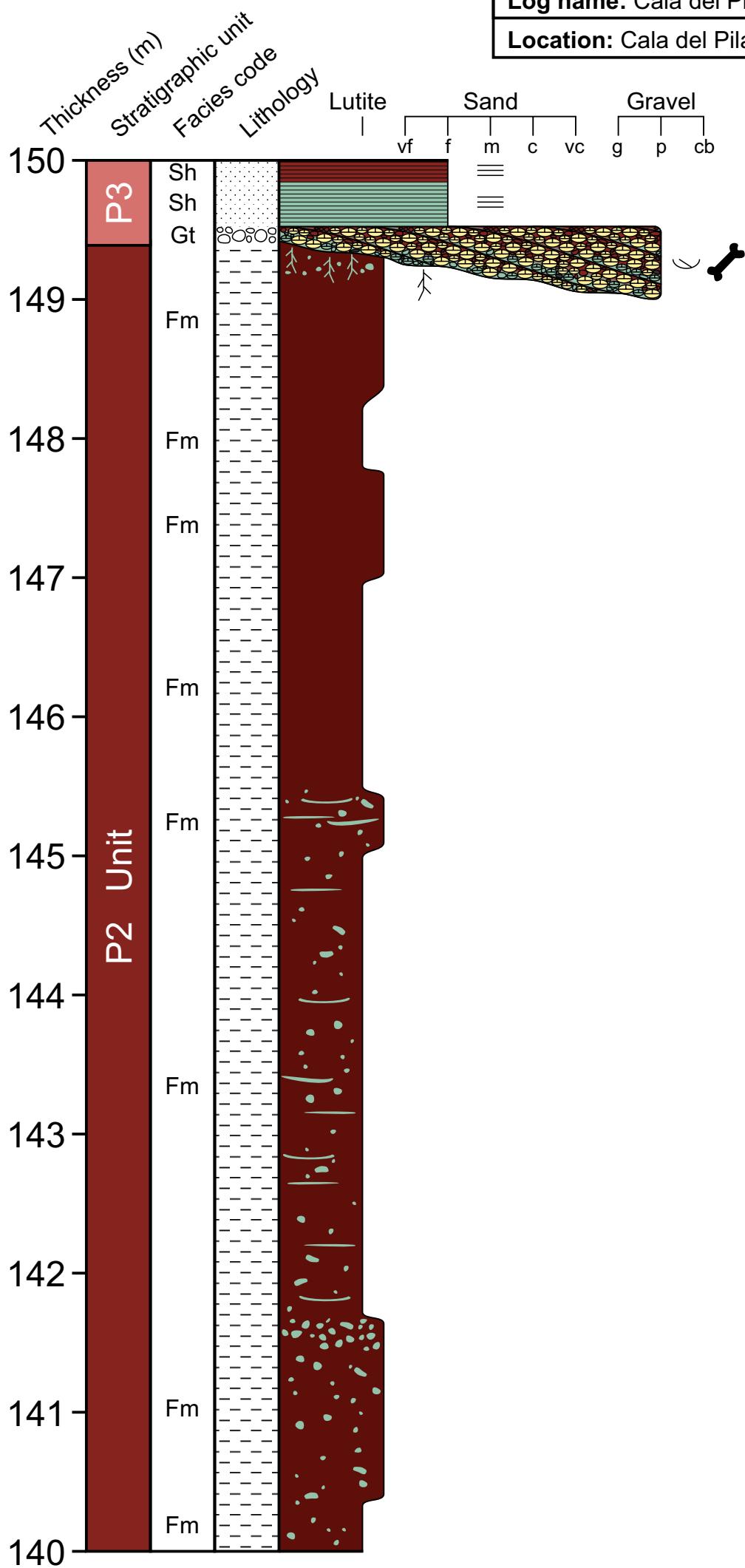
- [Parallel lines] Parallel lamination
- [Ripple marks] Ripple lamination
- [Convolute lines] Convoluted lamination
- [Tabular cross lines] Tabular cross stratification
- [Trough cross lines] Trough cross stratification
- [Wavy lines] Mud cracks
- [Soft pebbles] Soft pebbles
- [Carbonate nodules] Carbonate nodules
- [Positive granoselection] Positive granoselection

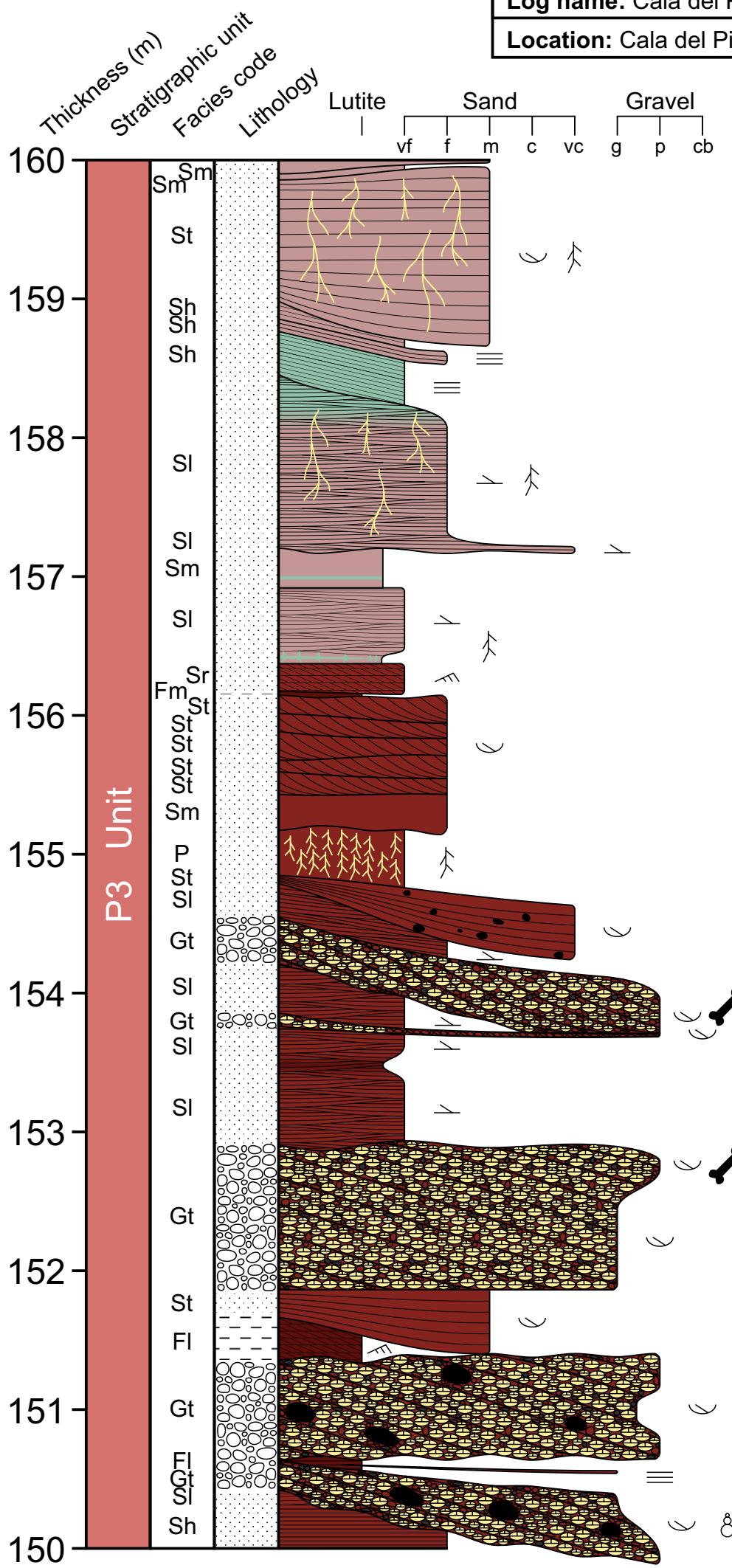
**Trace and body fossils**

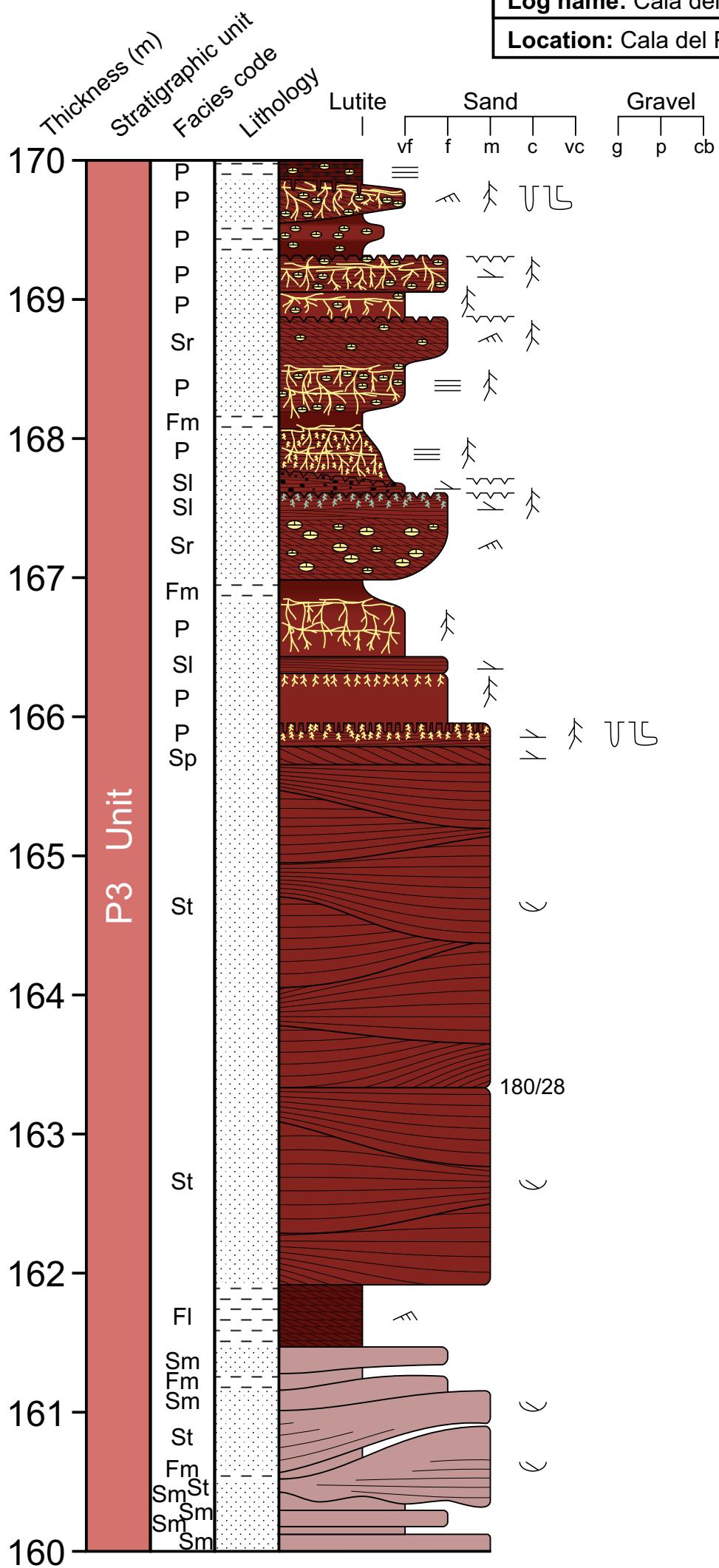
- [Roots] Rhizocretions
- [Leaves] Plant remains
- [Leaves] Plant debris / Coal
- [Logs] Tree logs
- [Microflora symbol] Microflora
- [Burrows symbol] Burrows
- [Invertebrate tracks symbol] Invertebrate tracks
- [Tetrapod tracks symbol] Tetrapod tracks
- [Bone symbol] Bones and bone fragments

**Other symbols**

- [Arrow] Fault
- 188/42 Strike/dip angle
- [X's] Abandoned copper mine







## Lithology

- Lutite
- Sandstone
- Conglomerate
- Semi-covered interval
- Covered interval

## Grain size

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

## Sedimentary structures

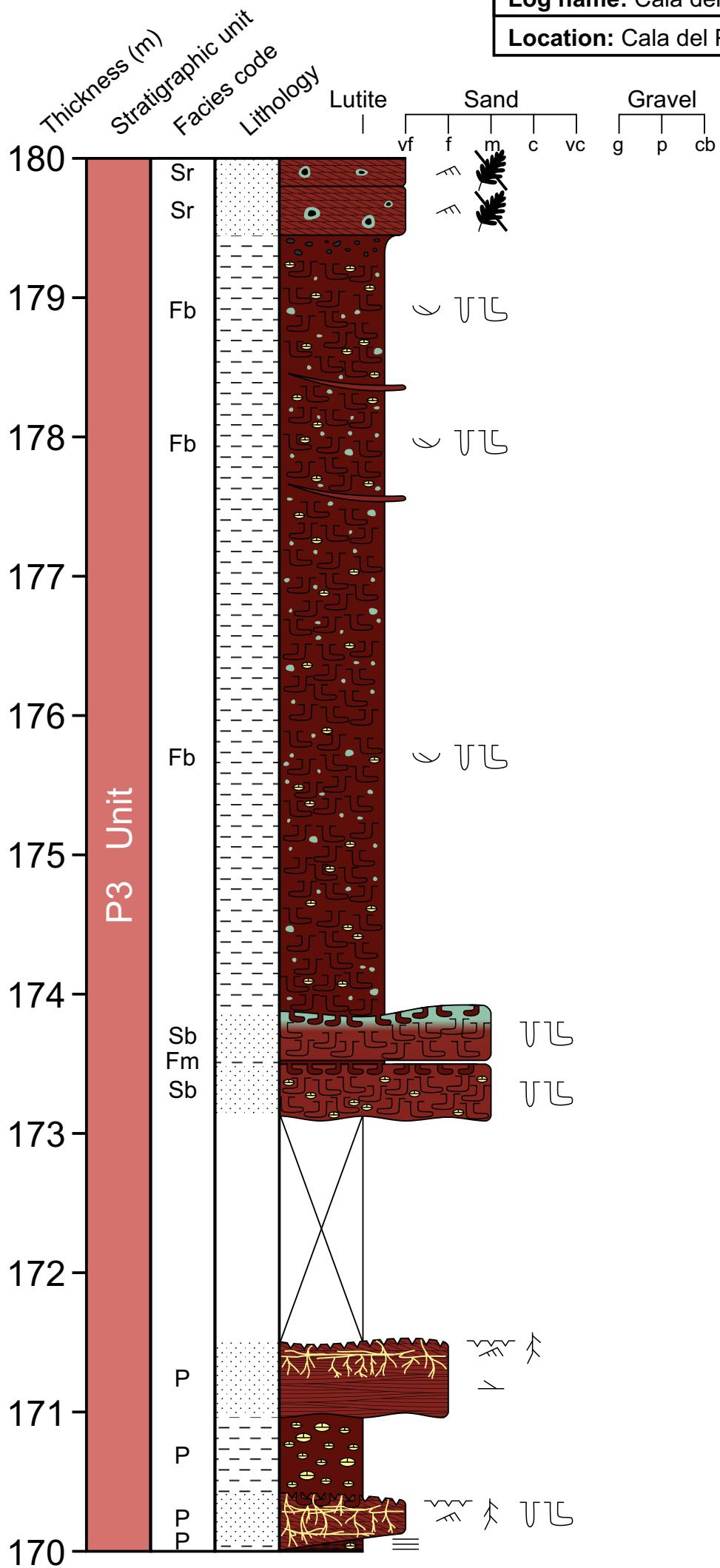
- Parallel lamination
- Ripple lamination
- Convoluted lamination
- Tabular cross stratification
- Trough cross stratification
- Mud cracks
- Soft pebbles
- Carbonate nodules
- Positive granoselection

## Trace and body fossils

- Rhizocretions
- Plant remains
- Plant debris / Coal
- Tree logs
- Microflora
- Burrows
- Invertebrate tracks
- Tetrapod tracks
- Bones and bone fragments

## Other symbols

- Fault
- 188/42 Strike/dip angle
- Abandoned copper mine



## Lithology

- [Dashed pattern] Lutite
- [Dotted pattern] Sandstone
- [Circles with diagonal lines] Conglomerate
- [Crosses] Semi-covered interval
- [X's] Covered interval

## Grain size

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

## Sedimentary structures

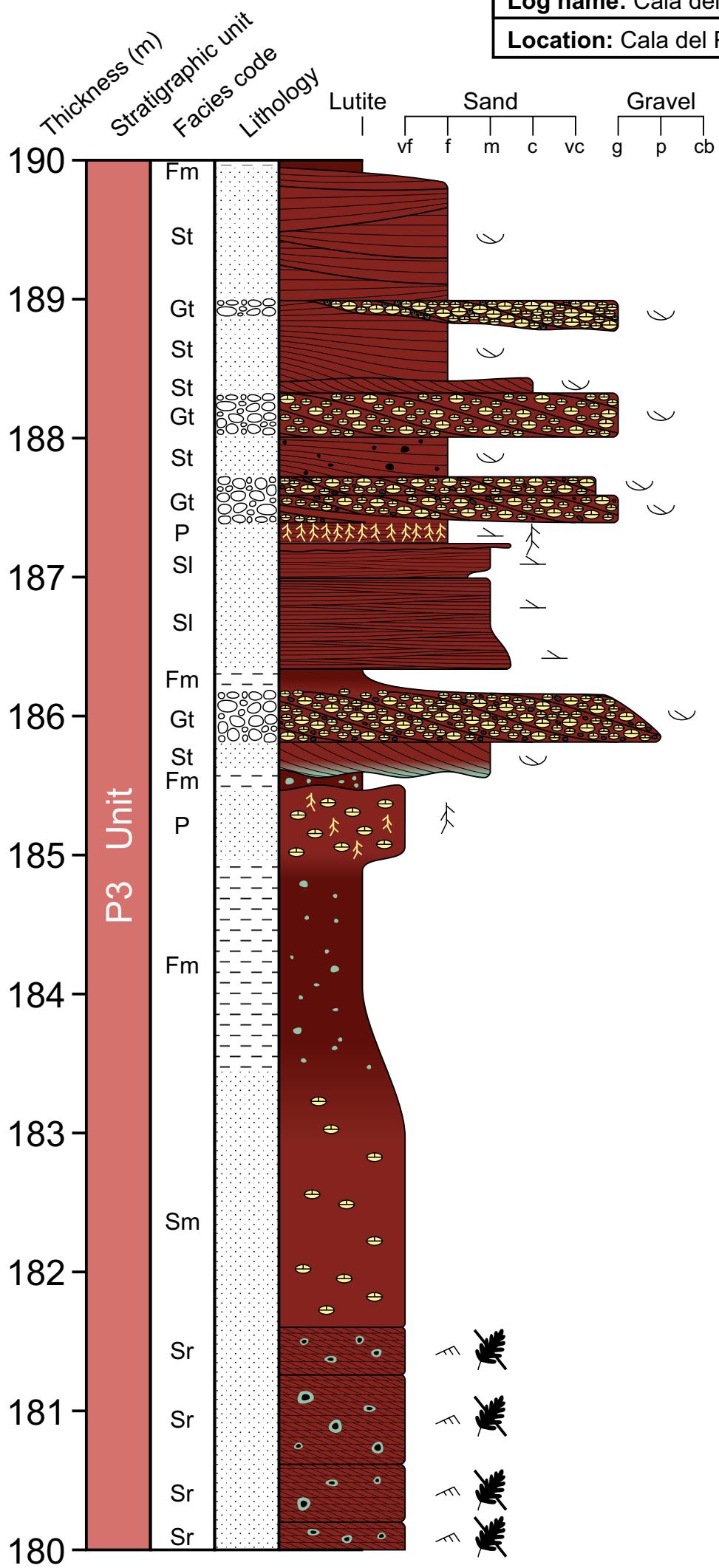
- [Horizontal lines] Parallel lamination
- [Wavy lines] Ripple lamination
- [Curly braces] Convoluted lamination
- [Diagonal lines] Tabular cross stratification
- [U-shaped curves] Trough cross stratification
- [Wavy lines with dots] Mud cracks
- [Black ovals] Soft pebbles
- [White circles with black outlines] Carbonate nodules
- [Open circles] Positive granoselection

## Trace and body fossils

- [Hand shape] Rhizocretions
- [Leaf shape] Plant remains
- [Small dots] Plant debris / Coal
- [Log shape] Tree logs
- [Triangle shape] Microflora
- [U-shaped curve] Burrows
- [Small dots] Invertebrate tracks
- [Hand shape] Tetrapod tracks
- [Bone shape] Bones and bone fragments

## Other symbols

- [Arrowhead] Fault
- 188/42 Strike/dip angle
- [X's] Abandoned copper mine



## Lithology

- [Dashed pattern] Lutite
- [Dotted pattern] Sandstone
- [Circles] Conglomerate
- [Diagonal lines] Semi-covered interval
- [X] Covered interval

## Grain size

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

## Sedimentary structures

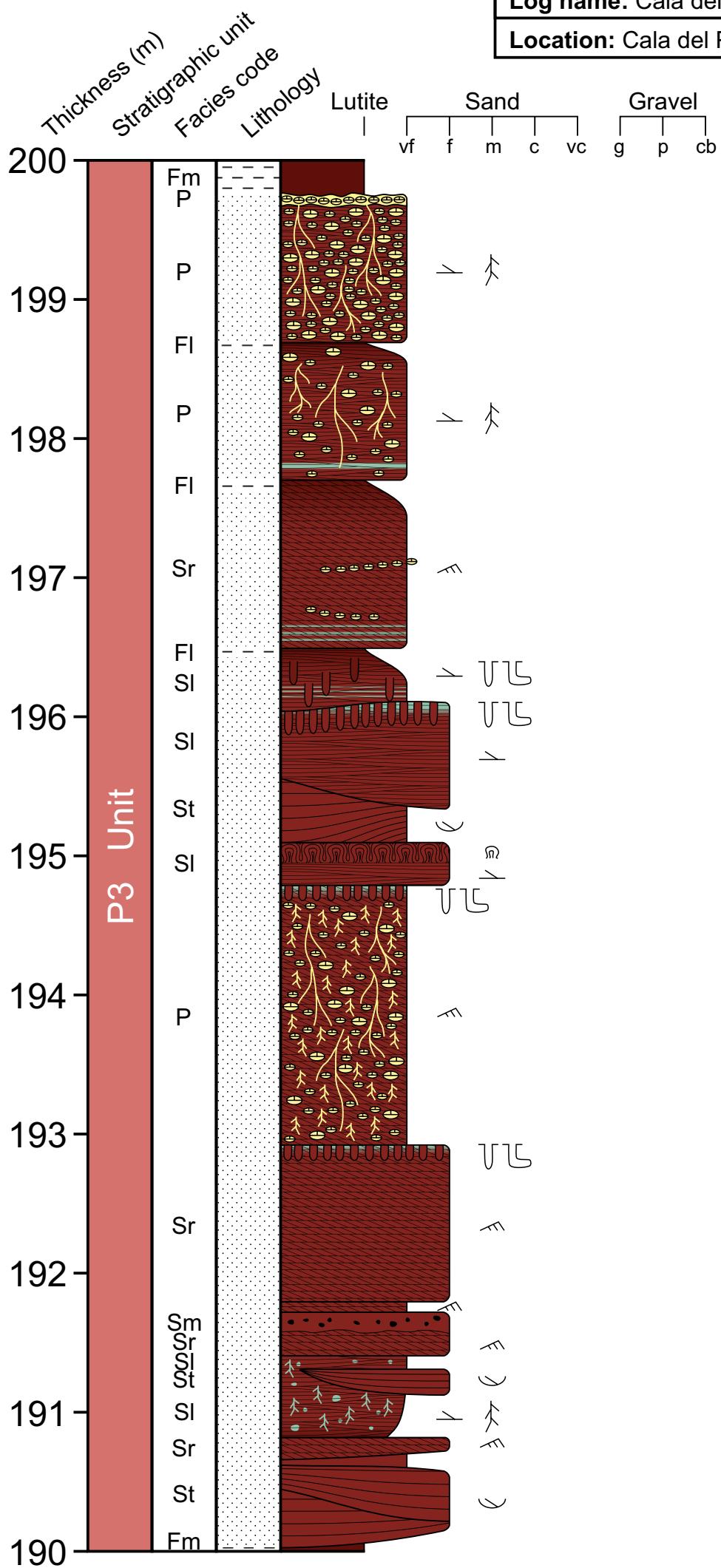
- [Parallel lines] Parallel lamination
- [Ripple marks] Ripple lamination
- [Convolute lines] Convoluted lamination
- [Tabular] Tabular cross stratification
- [Trough] Trough cross stratification
- [Wavy lines] Mud cracks
- [Soft pebbles] Soft pebbles
- [Carbonate nodules] Carbonate nodules
- [Positive granoselection] Positive granoselection

## Trace and body fossils

- [Roots] Rhizocretions
- [Leaves] Plant remains
- [Leaves] Plant debris / Coal
- [Logs] Tree logs
- [Microflora] Microflora
- [Burrows] Burrows
- [Invertebrate tracks] Invertebrate tracks
- [Hand] Tetrapod tracks
- [Bone] Bones and bone fragments

## Other symbols

- [Arrow] Fault
- 188/42 Strike/dip angle
- [X] Abandoned copper mine



## Lithology

- [Dashed pattern] Lutite
- [Dotted pattern] Sandstone
- [Circles with diagonal lines] Conglomerate
- [Cross-hatch] Semi-covered interval
- [X-hatch] Covered interval

## Grain size

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

## Sedimentary structures

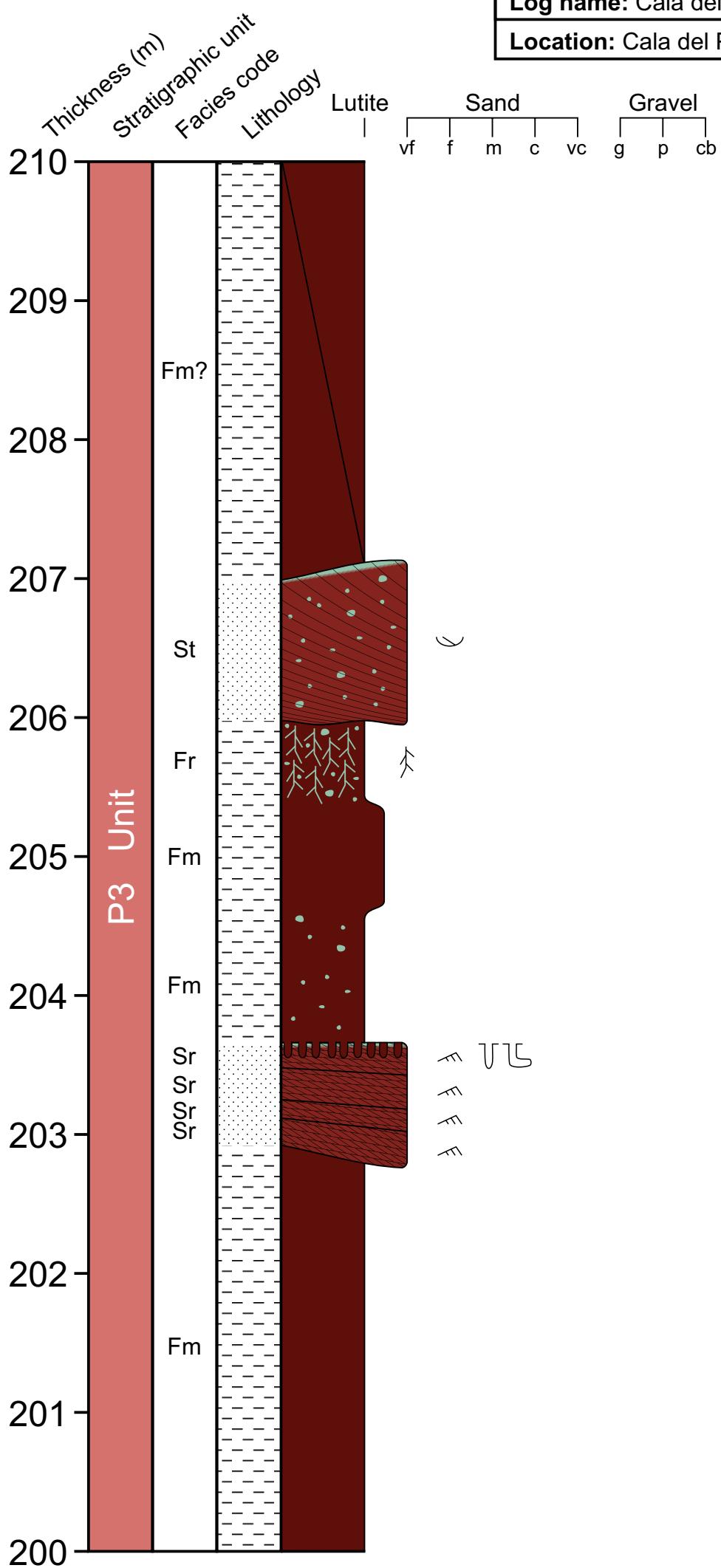
- [Horizontal lines] Parallel lamination
- [Wavy lines] Ripple lamination
- [Curly lines] Convoluted lamination
- [Diagonal lines] Tabular cross stratification
- [U-shaped lines] Trough cross stratification
- [Wavy lines with dots] Mud cracks
- [Black ovals] Soft pebbles
- [White ovals with black outlines] Carbonate nodules
- [Open circles] Positive granoselection

## Trace and body fossils

- [Plant icon] Rhizocretions
- [Leaf icon] Plant remains
- [Leaf icon] Plant debris / Coal
- [Log icon] Tree logs
- [Triangle icon] Microflora
- [Burrow icon] Burrows
- [Invertebrate tracks icon] Invertebrate tracks
- [Hand icon] Tetrapod tracks
- [Bone icon] Bones and bone fragments

## Other symbols

- [Arrow icon] Fault
- [X-hatch icon] 188/42 Strike/dip angle
- [Diamond icon] Abandoned copper mine

**Lithology**

- [Dashed pattern] Lutite
- [Dotted pattern] Sandstone
- [Circles] Conglomerate
- [Diagonal lines] Semi-covered interval
- [Crosses] Covered interval

**Grain size**

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

**Sedimentary structures**

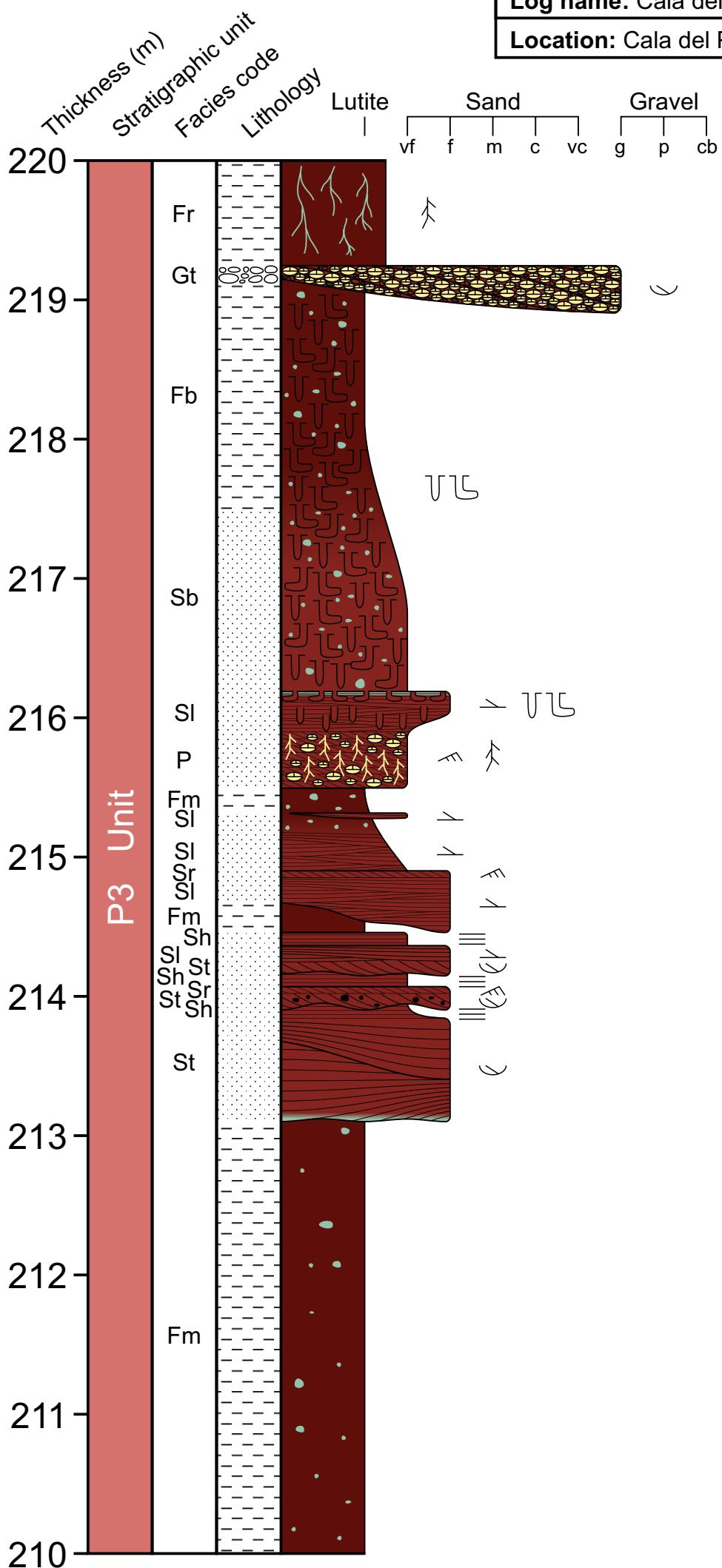
- [Horizontal lines] Parallel lamination
- [Wavy lines] Ripple lamination
- [Curly braces] Convoluted lamination
- [Upward arrows] Tabular cross stratification
- [Downward arrows] Trough cross stratification
- [Wavy lines with dots] Mud cracks
- [Black ovals] Soft pebbles
- [Small circles with a dot] Carbonate nodules
- [Open circle with a dot] Positive granoselection

**Trace and body fossils**

- [Hand-like symbol] Rhizocretions
- [Leaf-like symbol] Plant remains
- [Leaf-like symbol with a dot] Plant debris / Coal
- [Log-like symbol] Tree logs
- [Triangle-like symbol] Microflora
- [U-shaped symbol] Burrows
- [Small dots] Invertebrate tracks
- [Hand-like symbol] Tetrapod tracks
- [Bone-like symbol] Bones and bone fragments

**Other symbols**

- [Arrowhead symbol] Fault
- 188/42 Strike/dip angle
- [X symbol] Abandoned copper mine



## Lithology



Sandstone



Semi-covered interval



## Grain size

vf	Very fine-grained sandstone
f	Fine-grained sandstone
m	Medium-grained sandstone
c	Coarse-grained sandstone
vc	Very coarse-grained sandstone
g	Gravel
p	Pebble
cb	Cobble

## Sedimentary structures

=====	Parallel lamination
↗↗↗	Ripple lamination
ΩΩΩ	Convoluted lamination
↙↙↙	Tabular cross stratification
↙↙↙	Trough cross stratification
~~~~~	Mud cracks
●●●	Soft pebbles
⊕⊕⊕	Carbonate nodules
♂♂♂	Positive granoselection

## Trace and body fossils

↑↑↑	Rhizocretions
蕨蕨蕨	Plant remains
蕨蕨蕨	Plant debris / Coal
ilog ilog	Tree logs
△△△	Microflora
↙↙↙	Burrows
●●●	Invertebrate tracks
manus manus	Tetrapod tracks
bone bone	Bones and bone fragments

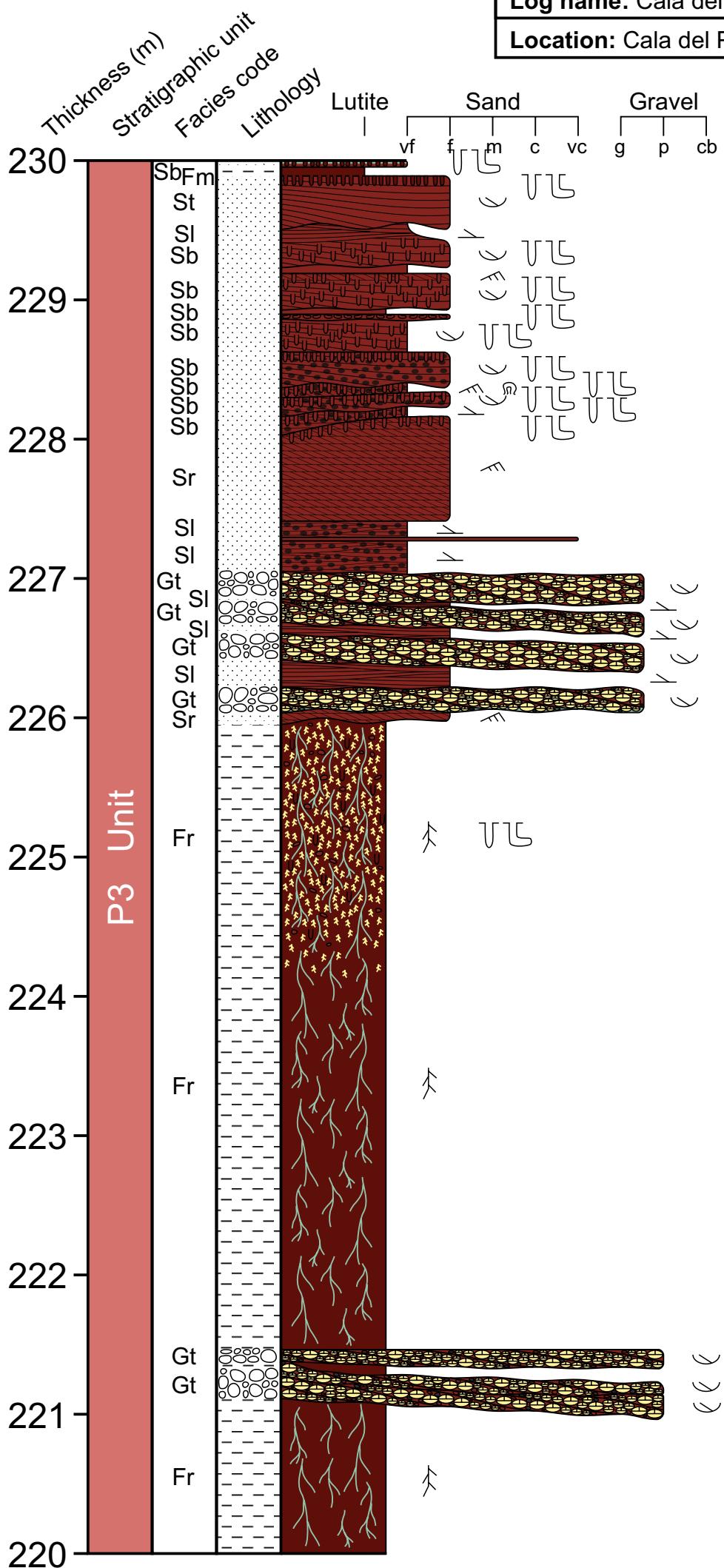
## Other symbols



188/42 Strike/dip angle



Abandoned copper mine



## Lithology

- Lutite
- Sandstone
- Conglomerate
- Semi-covered interval
- Covered interval

## Grain size

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

## Sedimentary structures

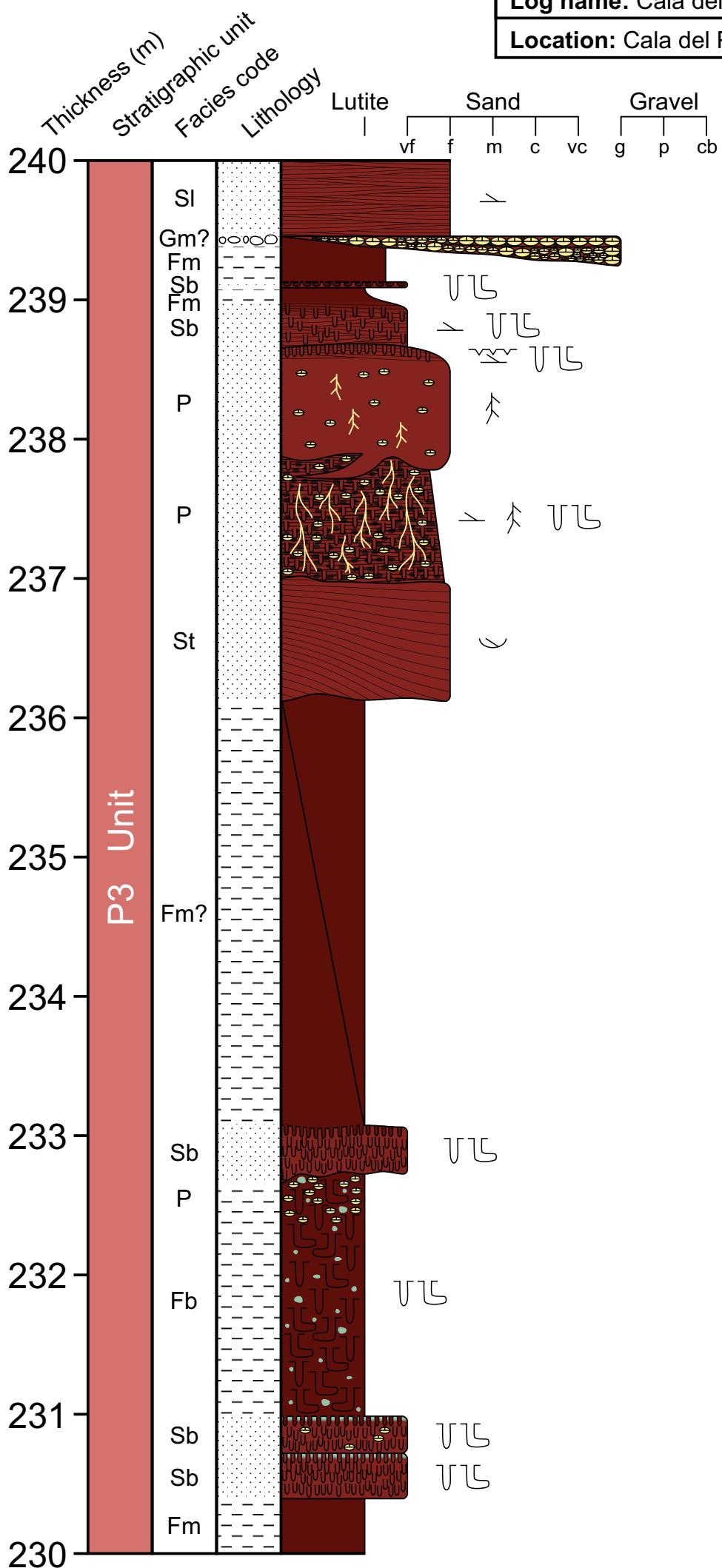
- Parallel lamination
- Ripple lamination
- Convoluted lamination
- Tabular cross stratification
- Trough cross stratification
- Mud cracks
- Soft pebbles
- Carbonate nodules
- Positive granoselection

## Trace and body fossils

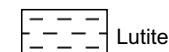
- Rhizocretions
- Plant remains
- Plant debris / Coal
- Tree logs
- Microflora
- Burrows
- Invertebrate tracks
- Tetrapod tracks
- Bones and bone fragments

## Other symbols

- Fault
- 188/42 Strike/dip angle
- Abandoned copper mine



## Lithology



Sandstone



Semi-covered interval



## Grain size

vf	Very fine-grained sandstone
f	Fine-grained sandstone
m	Medium-grained sandstone
c	Coarse-grained sandstone
vc	Very coarse-grained sandstone
g	Gravel
p	Pebble
cb	Cobble

## Sedimentary structures

=====	Parallel lamination
↗↖	Ripple lamination
Ω	Convoluted lamination
↙↗	Tabular cross stratification
↙↘	Trough cross stratification
~~~~~	Mud cracks
●●●	Soft pebbles
○○○	Carbonate nodules
○	Positive granoselection

## Trace and body fossils

↑	Rhizocretions
蕨	Plant remains
蕨	Plant debris / Coal
树	Tree logs
△	Microflora
↙↖	Burrows
●●●	Invertebrate tracks
手印	Tetrapod tracks
骨	Bones and bone fragments

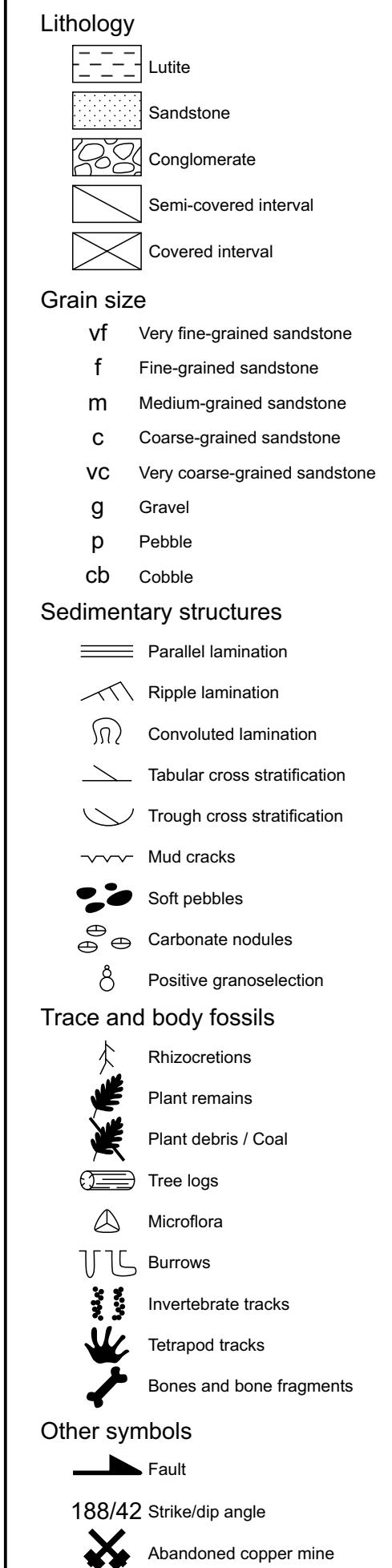
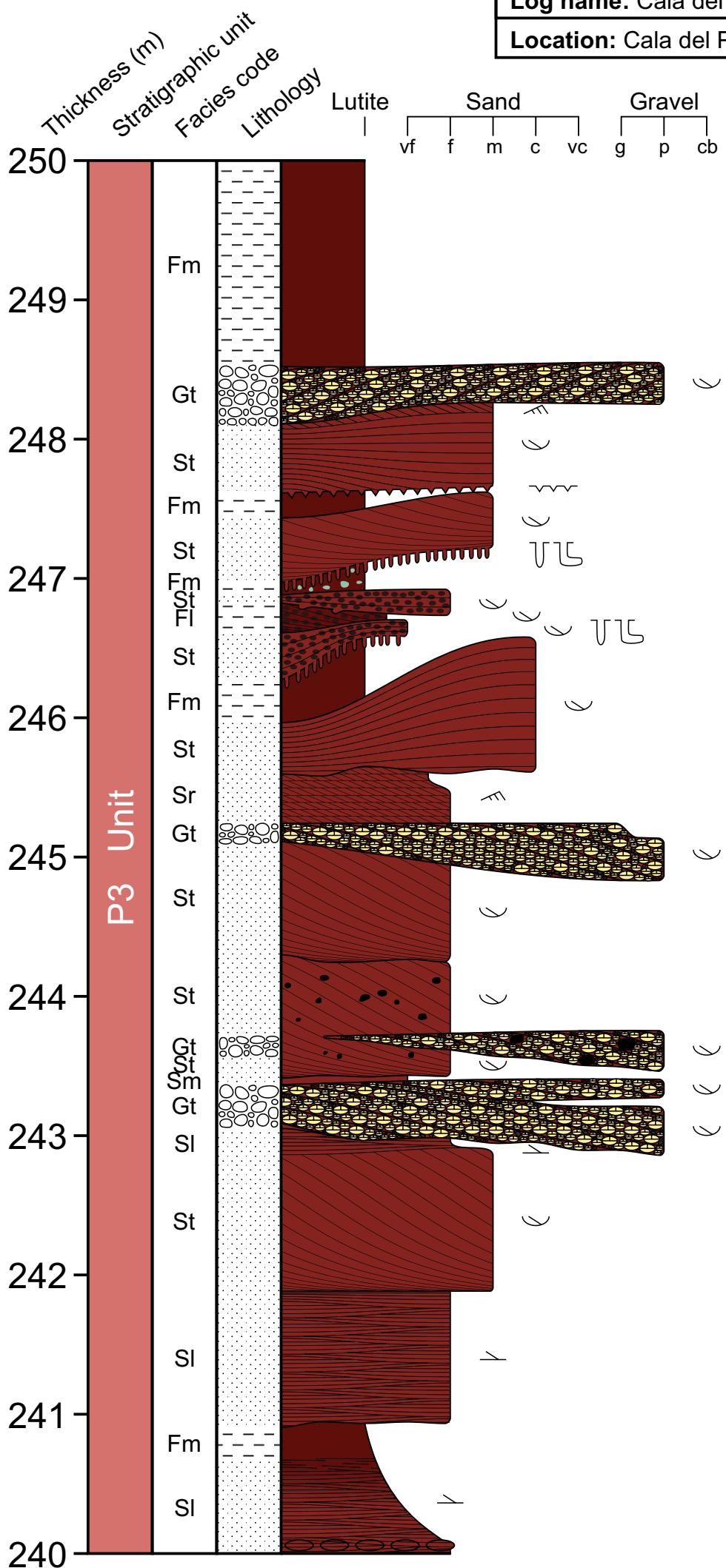
## Other symbols

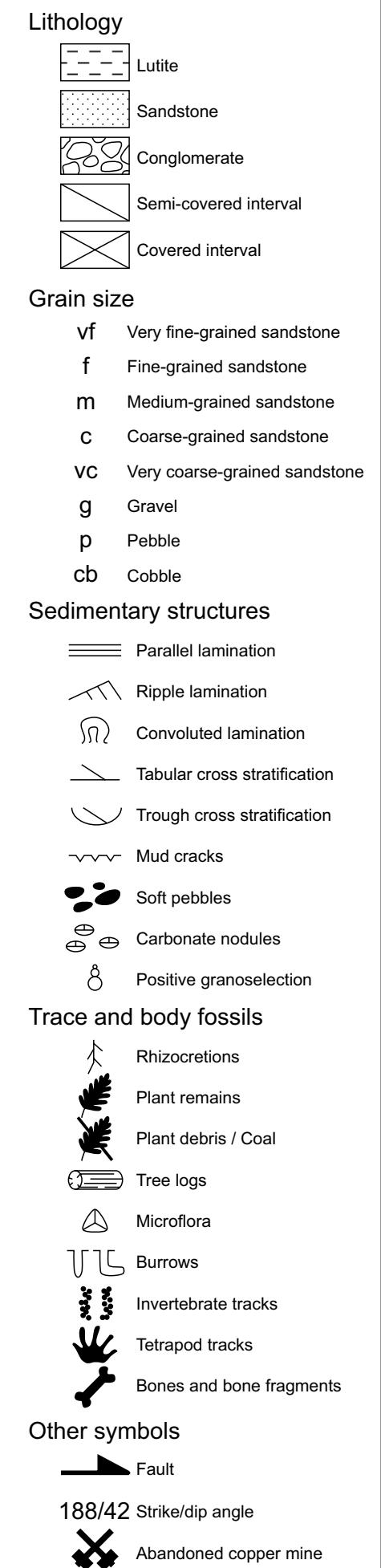
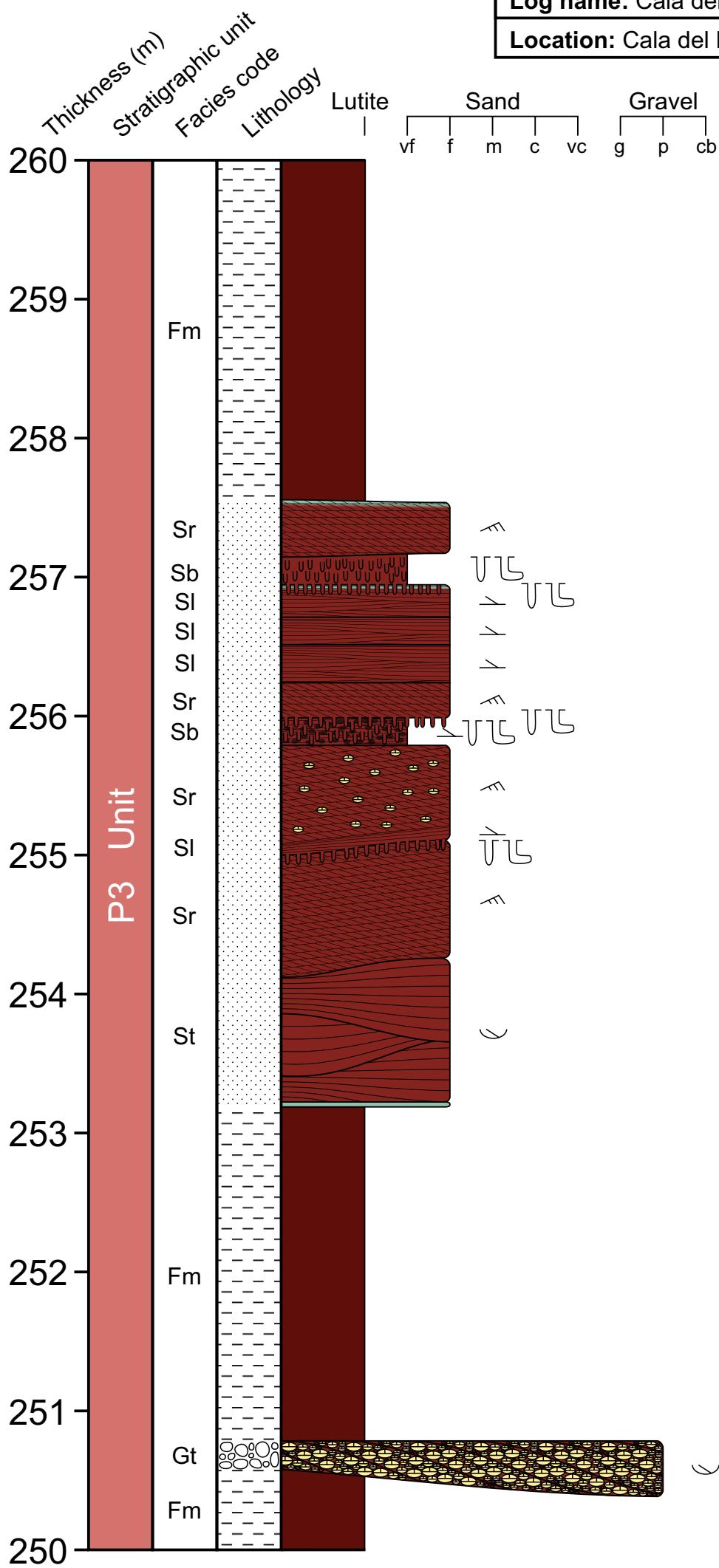


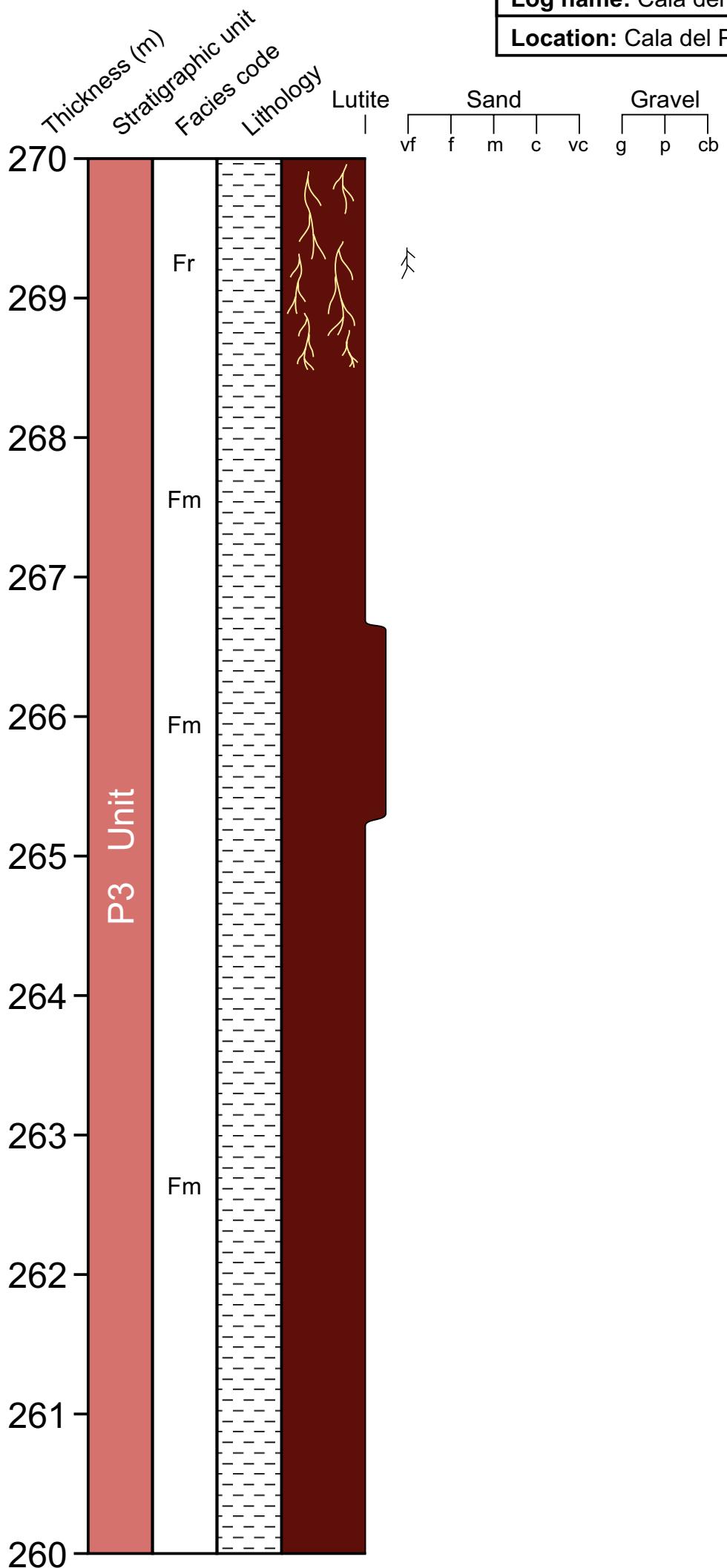
188/42 Strike/dip angle



Abandoned copper mine







## Lithology

- Lutite
- Sandstone
- Conglomerate
- Semi-covered interval
- Covered interval

## Grain size

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

## Sedimentary structures

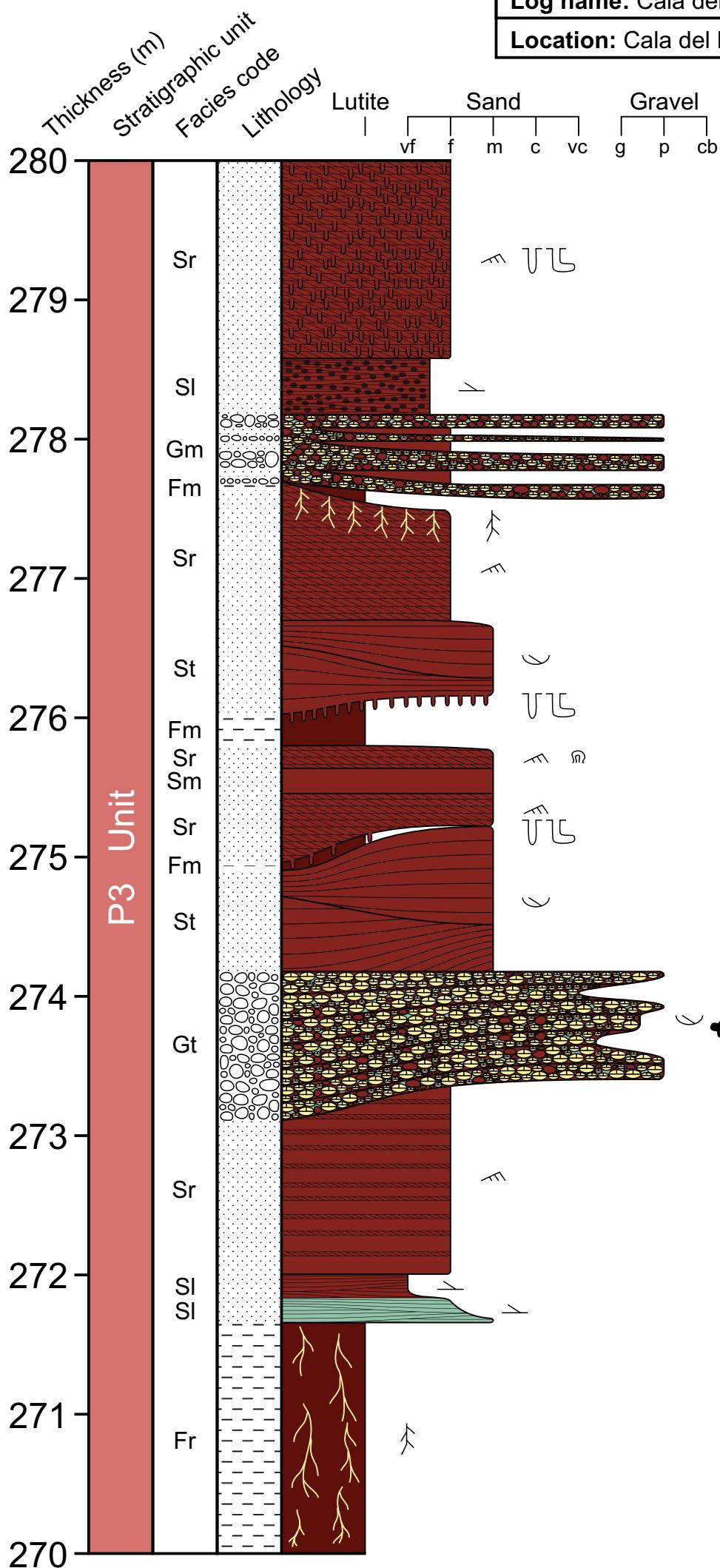
- Parallel lamination
- Ripple lamination
- Convoluted lamination
- Tabular cross stratification
- Trough cross stratification
- Mud cracks
- Soft pebbles
- Carbonate nodules
- Positive granoselection

## Trace and body fossils

- Rhizocreations
- Plant remains
- Plant debris / Coal
- Tree logs
- Microflora
- Burrows
- Invertebrate tracks
- Tetrapod tracks
- Bones and bone fragments

## Other symbols

- Fault
- 188/42 Strike/dip angle
- Abandoned copper mine



## Lithology

- [Dashed pattern] Lutite
- [Dotted pattern] Sandstone
- [Circles pattern] Conglomerate
- [Diagonal lines pattern] Semi-covered interval
- [X pattern] Covered interval

## Grain size

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

## Sedimentary structures

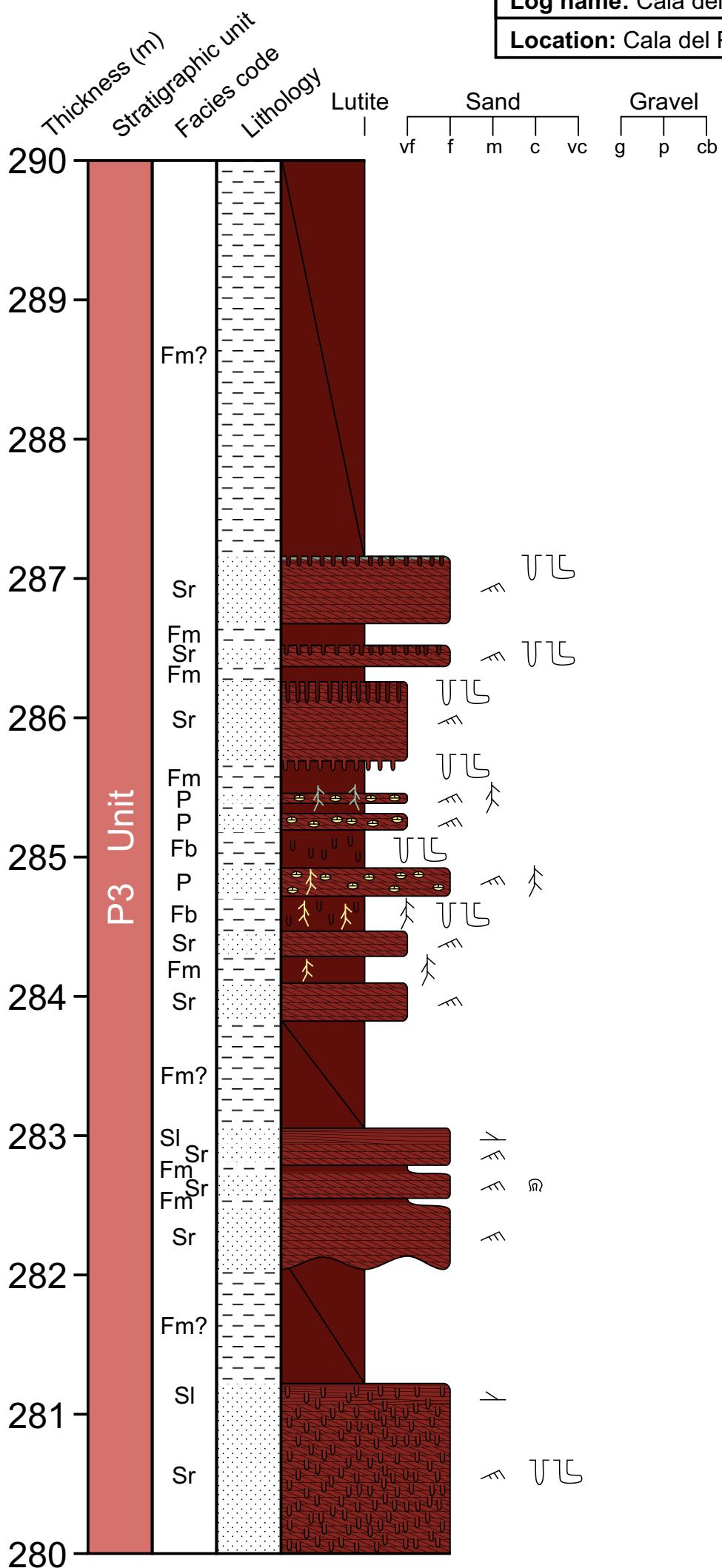
- [Parallel lines] Parallel lamination
- [Ripple marks] Ripple lamination
- [Convolute lines] Convoluted lamination
- [Tabular cross] Tabular cross stratification
- [Trough cross] Trough cross stratification
- [Wavy lines] Mud cracks
- [Soft pebbles] Soft pebbles
- [Carbonate nodules] Carbonate nodules
- [Positive granoselection] Positive granoselection

## Trace and body fossils

- [Roots] Rhizocretions
- [Leaves] Plant remains
- [Leaves] Plant debris / Coal
- [Logs] Tree logs
- [Microflora] Microflora
- [Burrows] Burrows
- [Invertebrate tracks] Invertebrate tracks
- [Hand] Tetrapod tracks
- [Bone] Bones and bone fragments

## Other symbols

- [Arrowhead] Fault
- 188/42 Strike/dip angle
- [X pattern] Abandoned copper mine

**Lithology**

- [Dashed pattern] Lutite
- [Dotted pattern] Sandstone
- [Circles] Conglomerate
- [Diagonal lines] Semi-covered interval
- [Crosses] Covered interval

**Grain size**

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

**Sedimentary structures**

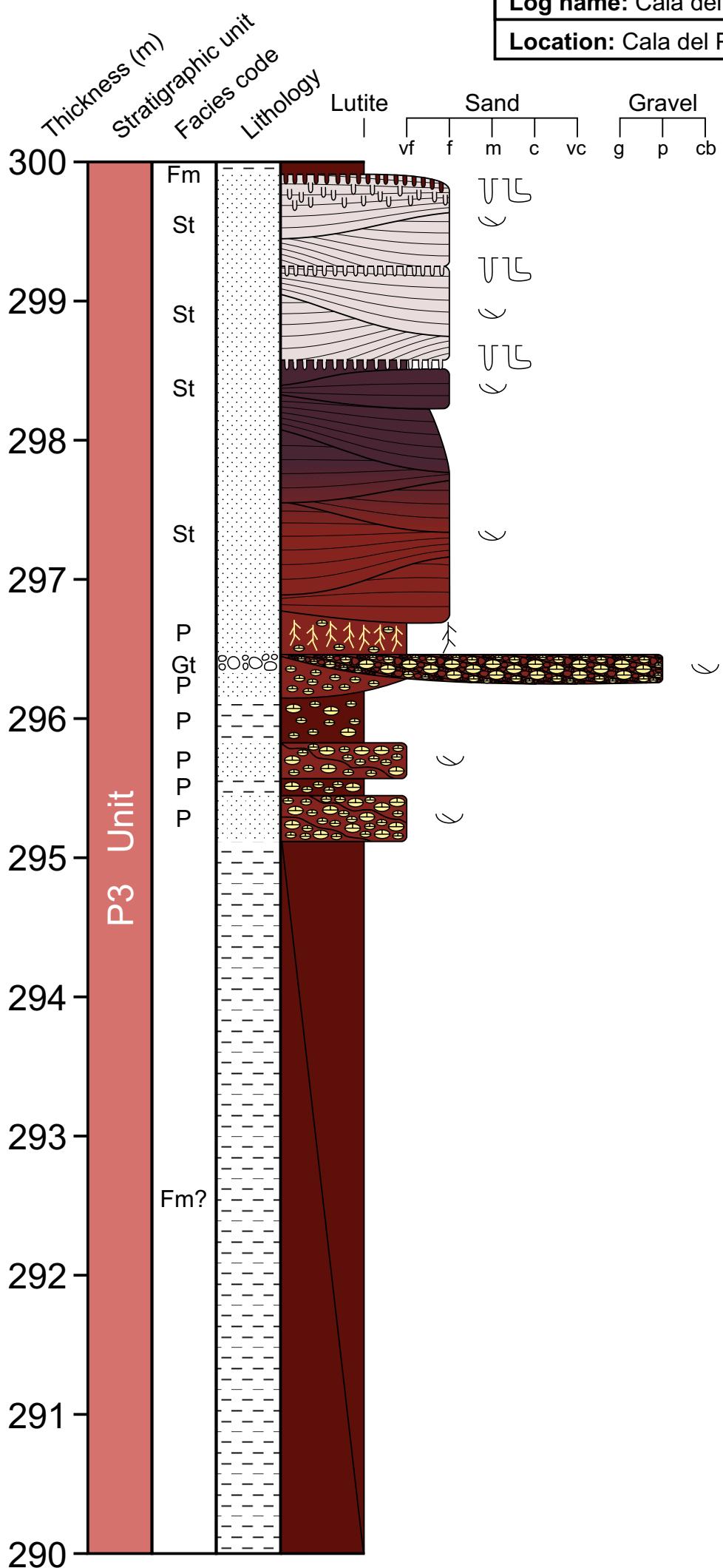
- [Parallel lines] Parallel lamination
- [Ripple marks] Ripple lamination
- [Convolute lines] Convolute lamination
- [Tabular lines] Tabular cross stratification
- [Trough lines] Trough cross stratification
- [Wavy lines] Mud cracks
- [Soft pebbles] Soft pebbles
- [Carbonate nodules] Carbonate nodules
- [Positive granoselection] Positive granoselection

**Trace and body fossils**

- [Plant remains] Rhizocretions
- [Plant debris / Coal] Plant remains
- [Tree logs] Plant debris / Coal
- [Microflora] Tree logs
- [Burrows] Microflora
- [Invertebrate tracks] Burrows
- [Tetrapod tracks] Invertebrate tracks
- [Bones and bone fragments] Tetrapod tracks

**Other symbols**

- [Arrow] Fault
- [Strike/dip angle] 188/42 Strike/dip angle
- [Cross] Abandoned copper mine

**Lithology**

- [Dashed pattern] Lutite
- [Dotted pattern] Sandstone
- [Diagonal lines] Conglomerate
- [Cross-hatch] Semi-covered interval
- [X-hatch] Covered interval

**Grain size**

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

**Sedimentary structures**

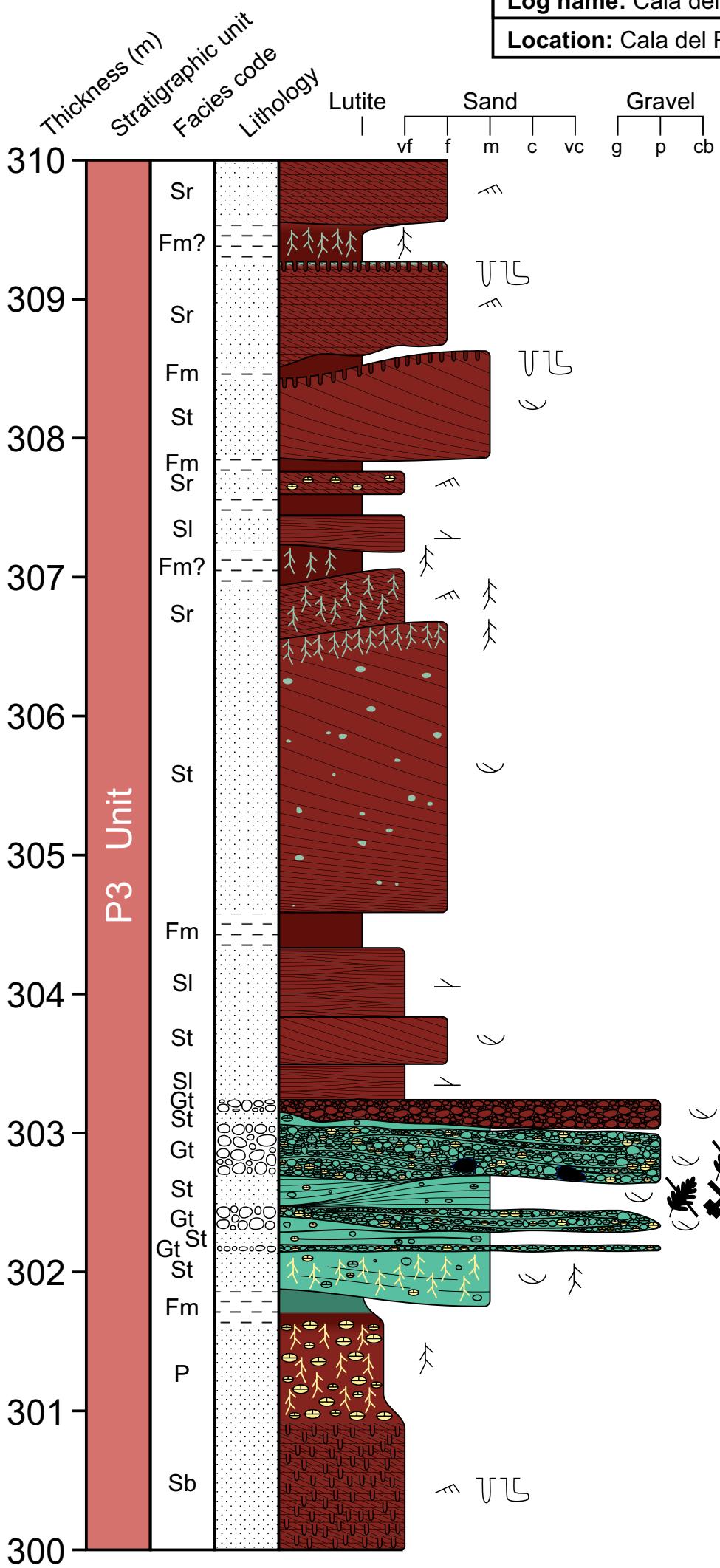
- [Parallel lines] Parallel lamination
- [Ripple marks] Ripple lamination
- [Convolute lines] Convoluted lamination
- [Tabular] Tabular cross stratification
- [Trough] Trough cross stratification
- [Wavy lines] Mud cracks
- [Soft pebbles] Soft pebbles
- [Carbonate nodules] Carbonate nodules
- [Positive granoselection] Positive granoselection

**Trace and body fossils**

- [Plant] Rhizocretions
- [Leaf] Plant remains
- [Leaf] Plant debris / Coal
- [Tree log] Tree logs
- [Microflora] Microflora
- [Burrow] Burrows
- [Invertebrate tracks] Invertebrate tracks
- [Hand] Tetrapod tracks
- [Bone] Bones and bone fragments

**Other symbols**

- [Arrow] Fault
- 188/42 Strike/dip angle
- [X-hatch] Abandoned copper mine



## Lithology

- [Dashed pattern] Lutite
- [Dotted pattern] Sandstone
- [Circles with dots] Conglomerate
- [Diagonal lines] Semi-covered interval
- [X pattern] Covered interval

## Grain size

- |    |                               |
|----|-------------------------------|
| vf | Very fine-grained sandstone   |
| f  | Fine-grained sandstone        |
| m  | Medium-grained sandstone      |
| c  | Coarse-grained sandstone      |
| vc | Very coarse-grained sandstone |
| g  | Gravel                        |
| p  | Pebble                        |
| cb | Cobble                        |

## Sedimentary structures

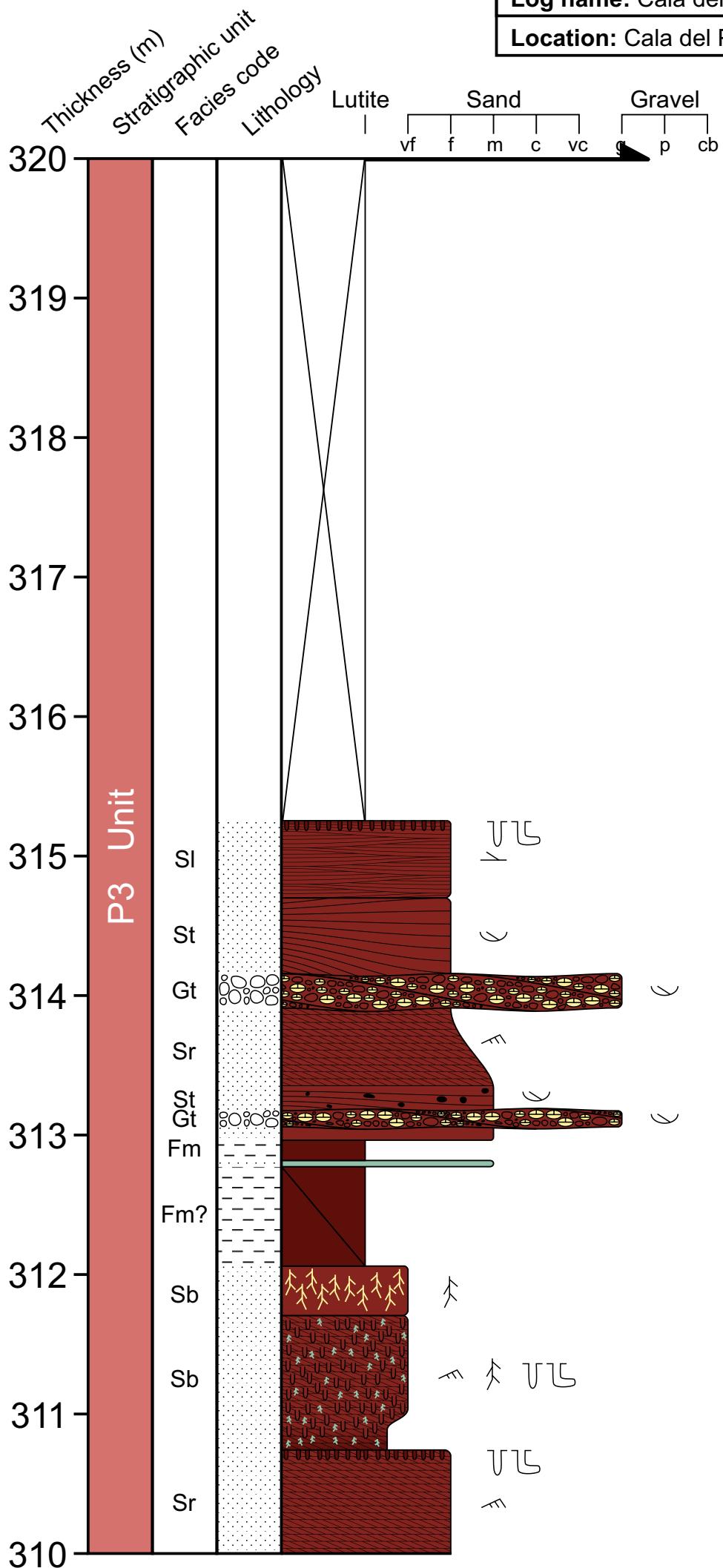
- ==== Parallel lamination
- ↗ Ripple lamination
- Ω Convolute lamination
- ↙ Tabular cross stratification
- ↙ Trough cross stratification
- ~~~~ Mud cracks
- Soft pebbles
- Carbonate nodules
- Positive granoselection

## Trace and body fossils

- ↑ Rhizocretions
- ↑↑ Plant remains
- ↑↑↑ Plant debris / Coal
- ↑↑↑↑ Tree logs
- △ Microflora
- ↙↙↙ Burrows
- Invertebrate tracks
- ↖↖↖ Tetrapod tracks
- ↑↑↑↑↑ Bones and bone fragments

## Other symbols

- Fault
- 188/42 Strike/dip angle
- ✗✗✗ Abandoned copper mine

**Lithology**

- Lutite (dashed pattern)
- Sandstone (dotted pattern)
- Conglomerate (circles)
- Semi-covered interval (diagonal lines)
- Covered interval (crosses)

**Grain size**

- vf Very fine-grained sandstone
- f Fine-grained sandstone
- m Medium-grained sandstone
- c Coarse-grained sandstone
- vc Very coarse-grained sandstone
- g Gravel
- p Pebble
- cb Cobble

**Sedimentary structures**

- Parallel lamination
- Ripple lamination
- Convolute lamination
- Tabular cross stratification
- Trough cross stratification
- Mud cracks
- Soft pebbles
- Carbonate nodules
- Positive grain selection

**Trace and body fossils**

- Rhizocretions
- Plant remains
- Plant debris / Coal
- Tree logs
- Microflora
- Burrows
- Invertebrate tracks
- Tetrapod tracks
- Bones and bone fragments

**Other symbols**

- Fault (arrow)
- 188/42 Strike/dip angle
- Abandoned copper mine (crosses)