

Table A: Framework grain parameters used for sandstones of the Cerro Pelón area

Parameters	Definition
Qs	Single crystal of quartz
QRm	Quartz in a phaneritic and polycrystalline fragment showing evidence of solid-state deformation
QRi	Quartz in a phaneritic and polycrystalline fragment showing any evidence of solid-state deformation
QLvf	Quartz fenocryst (>0.0625 mm in size) in a felsitic volcanic lithic grain
Qp	Aphanitic and polycrystalline quartz
Ks	Single crystal of K-feldspar
KRm	K-feldspar in a phaneritic and polycrystalline fragment showing evidence of solid-state deformation
KRi	K-feldspar in a phaneritic and polycrystalline fragment showing any evidence of solid-state deformation
Ps	Single crystal of plagioclase
PRm	Plagioclase in a phaneritic and polycrystalline fragment showing evidence of solid-state deformation
PRi	Plagioclase in a phaneritic and polycrystalline fragment showing any evidence of solid-state deformation
PLvl	Plagioclase fenocryst (>0.0625 mm in size) in a lathwork volcanic lithic grain
Lmf(1-5)	Metapsammitic/metafelsitic lithic grain (numbers from 1 to 5 indicate metamorphic grades according to Garzanti and Vezzoli, 2003)
Lmf?	Metapsammitic/metafelsitic lithic grain of undetermined metamorphic grade
Lmp(1-5)	Metapelitic lithic grain (numbers from 1 to 5 indicate metamorphic grades according to Garzanti and Vezzoli, 2003)
Lmb(1-5)	Metabasitic lithic grain (numbers from 1 to 5 indicate metamorphic grades according to Garzanti and Vezzoli, 2003)
Lvl	Lathwork volcanic lithic grain
Lvmi	Microclitic volcanic lithic grain
Lvf	Felsitic volcanic lithic grain
Lss	Siliciclastic sedimentary lithic grain
Lsc	Carbonate sedimentary lithic grain
Lu	Ultramafic lithic grain
H	Translucent heavy minerals
Opaque	Opaque grains
Und	Undifferentiated grains
Qm	Total monocrystalline quartz (Qs+QRm+QRi+QLvf)
Q	Total quartz (Qm+Qp)
K	Total K-feldspar (Ks+KRm+KRi)
P	Total plagioclase (Ps+PRm+PRi+PLvl)
F	Total feldspar (K+P)
Lm	Total metamorphic lithic grains (Lmf+Lmp+Lmb)
Lv	Total volcanic lithic grains (Lvl+Lvmi+Lvf)
Ls	Total sedimentary lithic grains (Lss+Lsc)
L	Total lithic grains (Lm+Lv+Ls+Lu)