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SYMBOLS AND ABBREVIATIONS

θ	=	Scratching direction
α	=	Bedding plane orientations
β	=	the angle between normal bedding planes and major principal stress
CAI	=	CERCHAR abrasivity index
HRC	=	Rockwell hardness
XRD	=	X-ray diffraction analysis
EQC	=	Equivalent quartz content
SE	=	Specific energy
SSE	=	Scratching specific energy
CSE	=	CERCHAR specific energy
W	=	Work done
V	=	Material removed volume or mean groove volume
d	=	Diameter of wear flat area of stylus tip
d_{sc}	=	Wear flat of stylus tip for saw cut surface specimen
N	=	Normal load
F	=	Horizontal force or ploughing force
d_s	=	Scratching distance
d	=	Wear flat width of stylus tip
T	=	Torque
P	=	Screw pitch