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List of Abbreviations

Abbreviation	Meaning
Corg	Organic carbon
CIA	Chemical Index of Alteration
PIA	Plagioclase Alteration Index
P/F	Plagioclases/feldspars
K-feldspar	Potassium feldspar
Q/F	Quartz/feldspar
TDS	Total dissolved Solids
L	Litre
μm	Micrometer
m	Metre
kg	Kilogram
ASTM	American Society for Testing and Materials
ICP-AES	Inductively Coupled Plasma-Atomic Emission Spectrometer
IRS	International Rock standard
CEM MARS	Microwave accelerated reactor system- 5
LOI	Loss on Ignition
DW	Dry weight
OC	Organic Carbon
TC	Total Carbon
IC	Inorganic Carbon
NDIR	Non dispersive infra red
PMT	Photo Multiplier Tube

P/B	Peak/background
RSD	Relative standard deviation
USGS	United States Geological Survey
XRF	X-ray fluorescence
WD-XRF	Wavelength dispersive- X-ray Fluorescence
A-CN-K	$\text{Al}_2\text{O}_3\text{-CaO+NaO-K}_2\text{O}$
A-CNK-FM	$\text{Al}_2\text{O}_3\text{-CaO+NaO-K}_2\text{O-FeO+MgO}$
SW	South west
WSW	West-South-West
MCM	Million cubic meters
CWC	Central Water Commission
TPB	Transhimalayan Plutonic Belt
ENE-WSW	East-Northeast – West-Southwest
HFT	Himalayan Frontal Thrust
MBT	Main Boundary Thrust
MCT	Main Central Thrust
MNT	Main Northern Thrust
NE	North east
NBPZ	North Bank Plain Zone
UBVZ	Upper Brahmaputra Valley Zone
CBVZ	Central Brahmaputra Valley Zone
LBVZ	Lower Brahmaputra Valley Zone
CGWB	Central Ground Water Board

PSG	Pasighat
DIB	Dibrugarh
TEZ	Tezpur
GHY	Guwahati
DHBR	Dhuburi
SS	Suspended
CH	Channel
FP	Floodplain
BNK	Overbank
Qtz	Quartz
Ortho	Orthoclase
Plagio	Plagioclase
Musco	Muscovite
Bio	Biotite
Horn	Hornblende
Chl	Chlorite
Dol	Dolomite
Cal	Calcite
Micro	Microcline
Apa	Apatite
Ill	Illite
Kao	Kaolinite
Smec	Smectite

Mont	Montmorillonite
Vermi	Vermiculite
Mz	Mean grain size
DOC	Dissolved organic carbon
POC	Particulate organic carbon
DIC	Dissolved inorganic carbon
ANOVA	Analysis of variance
LSD	Least significance difference
SPM	Suspended particulate matter
G-B-M	Ganga Brahmaputra Meghna
LS	Sediment load
Qt	Discharge
NASQAN	National Stream Quality Accounting Network
USDA	United States Department of Agriculture