

Textural Classification based on Mean Grain-Size

| Particle Size Range (ϕ) | Particle Size Range (mm) | Textural Classifier |
|---------------------------------|---|---------------------|
| $-8 \leq \bar{x}_\phi$ | $\bar{x}_m \geq 256$ | Boulders |
| $-6.0 \leq \bar{x}_\phi < -8.0$ | $64 \geq \bar{x}_m < 256$ | Cobbles |
| $-2.0 \leq \bar{x}_\phi < -6.0$ | $4 \geq \bar{x}_m < 64$ | Pebbles |
| $-1.0 \leq \bar{x}_\phi < -2.0$ | $2 \geq \bar{x}_m < 4$ | Gravel Granules |
| $0.0 \leq \bar{x}_\phi < -1.0$ | $1 \geq \bar{x}_m < 2$ | Very Coarse Sand |
| $1.0 \leq \bar{x}_\phi < 0.0$ | $0.5 \geq \bar{x}_m < 1$ | Coarse Sand |
| $2.0 \leq \bar{x}_\phi < 1.0$ | $0.25 \geq \bar{x}_m < 0.5$ | Medium Sand |
| $3.0 \leq \bar{x}_\phi < 2.0$ | $0.125 \geq \bar{x}_m < 0.25$ | Fine Sand |
| $4.0 \leq \bar{x}_\phi < 3.0$ | $0.0625 \geq \bar{x}_m < 0.125$ | Very Fine Sand |
| $5.0 \leq \bar{x}_\phi < 4.0$ | $0.03125 \geq \bar{x}_m < 0.0625$ | Coarse Silt |
| $6.0 \leq \bar{x}_\phi < 5.0$ | $0.015625 \geq \bar{x}_m < 0.03125$ | Medium Silt |
| $7.0 \leq \bar{x}_\phi < 6.0$ | $0.0078125 \geq \bar{x}_m < 0.015625$ | Fine Silt |
| $9.0 \leq \bar{x}_\phi < 7.0$ | $0.00390625 \geq \bar{x}_m < 0.0078125$ | Very Fine Silt |
| $9.0 \bar{x}_\phi > 9.0$ | $\bar{x}_m < 0.00390625$ | Clay |