

Professional Geophysicists (PGp) Examination Sample Questions

Example No. 1

Increasing geophone separation of a 24-channel array and using a passive source will have what effect on a multichannel analysis of surface waves (MASW) profile?

- A. Increase depth of penetration and lower near-surface resolution
- B. Decrease depth of penetration and improve near-surface resolution
- C. Improve signal-to-noise ratio resulting in better layer resolution
- D. Overcome bandwidth limitations in seismographs

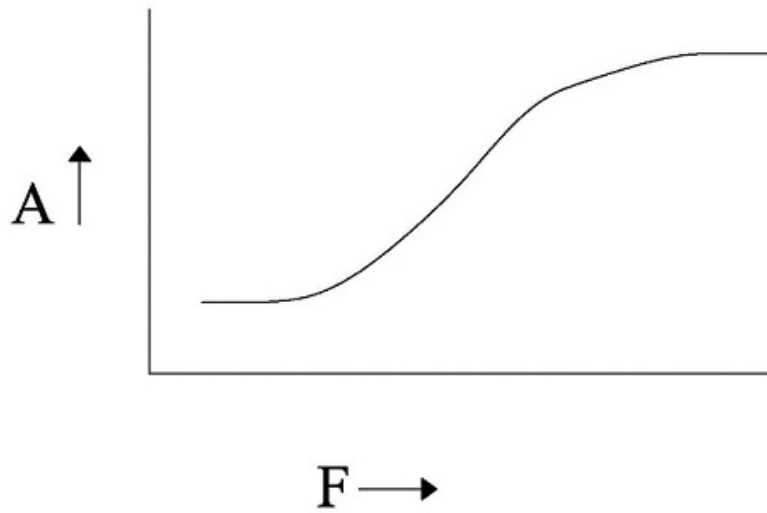
Example No. 2

For Resistivity survey with a fixed transmitter current, depth of investigation increases with:

- A. higher resistivities in the survey area.
- B. higher conductivities in the survey area.
- C. reduced electrical contact with the ground at the receiver (voltage) electrodes.
- D. reduced separation between transmitter (current) and receiver (voltage) electrodes.

Example No. 3

Use the exhibit provided to answer the following question



The frequency response of which of the following filters is shown in the diagram?

- A. Low-pass
- B. Band-pass
- C. Band-reject
- D. High-pass