

FIGURE 1 : Topographic map of 1/10000th of the Bouillide valley.

PRACTICAL TEST : ALONG THE BOUILLIDE

"La Bouillide" is a small river that crosses the plateau of Sophia Antipolis. Its journey is mysterious. Indeed, the flow of the watercourse can vary strongly over a few hundred meters to the point that it disappears at times.

"La Bouillide" adalah sungai kecil yang memotong dataran tinggi (platau) di Sophia Antiphilis. Hal itu menjadi misterius selama ini. Ditambah lagi aliran dari watercouse dapat sangat kuat sampai diatas beberapa ratus meter dari salah titik yang diukur pada saat tertentu.

Problem : What are the indices of ground that explain this significant variation in flow?

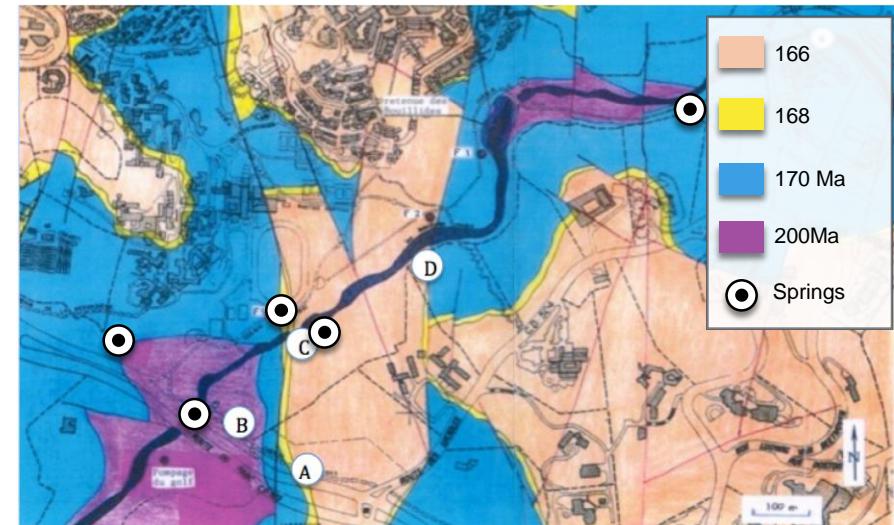


Figure 2. Geological map of the area shown in Figure 1 (from the thesis "Geology ankarstic hydrogeology of the basin of the Brogue and its edoe" by Crystian mangan, 1982)

Problem/Permasalahan : apakah itu merupakan indikasi dari tanah/lahan yang signifikan dalam aliran

Figures 1 and 2 provide general information on the topography and geology of « La bouillide ». The points of interest that you are working on are shown on the maps (A to D).

Gambar 1 merupakan kondisi peta topografi dan gambar 2 merupakan kondisi peta geologi dari La Bouillide". Point masalah yang harus anda pecahkan ditunjukkan dalam peta dari titik A sampai titik D (A, B, C, D).

INSTRUCTIONS

The observations made at the four sites (A to D) will allow you to answer the question. The question sheet will be distributed in the classroom after your fieldwork.

Observasi yang dilakukan di 4 site (A; B;C dan D) untuk menjawab pertanyaan. ODi lembar pertanyaan didiskusikan di klas setelah kamu kerja lapangan.

You have a notebook to describe your observations and measurements at each of the four sites. Each site is supervised by referees. They will ensure smooth progress, but will not answer any content questions.

You will be provided with a set of tools to perform your investigations.

Kamu punya buku catatan untuk deskripsi observasi mu dan pengukuran setiap lokasi di 4 site tersebut. Setiap site ada superviser sebagai referensi.

akan menyampaikan progres/bahasan tiap lokasi akan tetapi tidak akan menjawab pertanyaan. Anda akan mengambil dan membawa alat unuk investigasi.

SITE A

Equipment provided :

A compass and clinometer.

Hydrochloric acid, pipette and watch glass.

Sample of glass and steel.

Peralatan

Kompas geologi dan Klinometer

HCl, pipet dan gelas ukur

Sampel pada glas dan logam

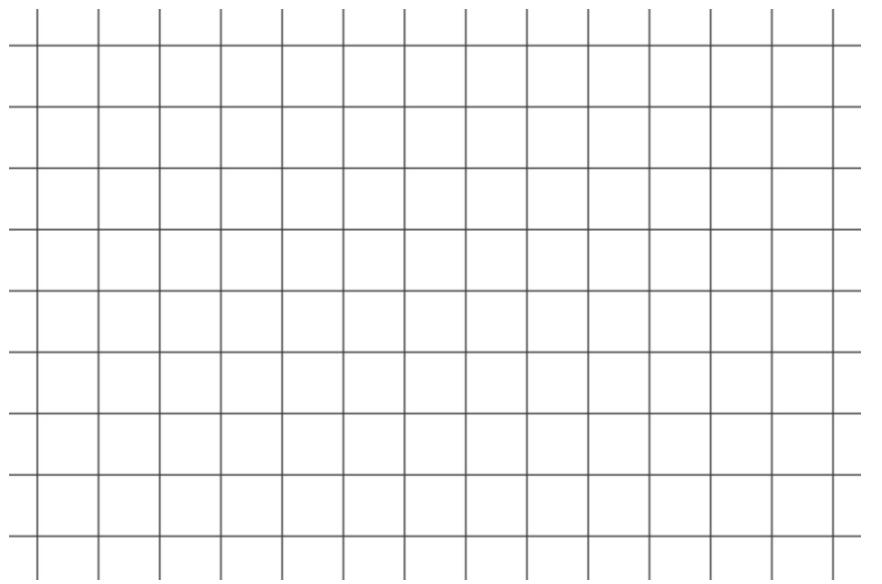
Instructions for observation :

Perintah Observasi :

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Drawing of the site :



Your notes :

- Determine the rocks category (e.g. sedimentary, metamorphic, magmatic)-
- Accurately identify the rock (e.g. limestone, granite, schist, etc...).
- Take notes and draw a labeled outcrop diagram.
- Deskripsikan singkapan (gambar sket/dimensi singkapan, kondisi batuan)
- Determinasikan/deskripsi kategori batuan (batuan sedimen, batuan metamorf, batuan magmagnetik/beku)
- Determinasi/deskripsi batuan sampai ke arah nama batuan sedimen, metamorf, maupun batuan beku (batugamping, schist, granit)

Peralatan :

Kompas dan Klinometer

Larutan HCL dengan pipet dan gelas ukur (watch glass)

SITE B

Equipment provided :

A board on mobile support at two axes.

A compass and clinometer.

Hydrochloric acid, pipette and watch glass.

Sample of glass and steel.

Peralatan

Klip bord

Kompas dan klinometer

HCl, pipet dan gelas ukur

Sampel pada glas dan logam

Instructions for observation :

Perintah Observasi :

- Determinasikan/deskripsi kategori batuan (batuan sedimen, batuan metamorf, batuan magmagnetik/beku)

- Determinasi/deskripsi batuan sampai ke arah nama batuan sedimen, metamorf, maupun batuan beku (batugamping, schist, granit)
- Deskripsikan singkapan (gambar sket/dimensi singkapan, kondisi batuan)

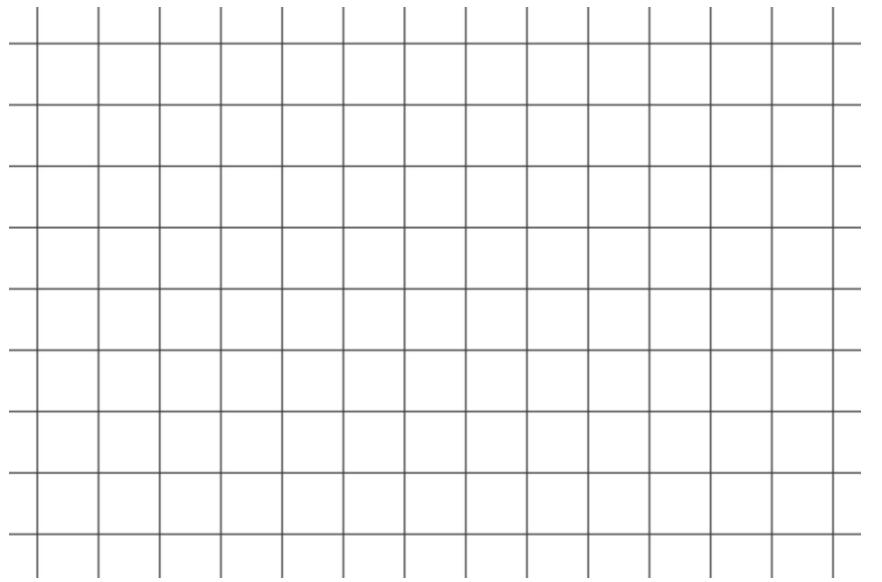
Peralatan

Kompas dan klinometer

Klip Board



Drawing of the site :



Your notes :

- Determine the rock category ~~5/9/2~~. sedimentary, metamorphic or

magmatic)

- Accurately identify the rock (e.g. limestone, granite, schist, etc...).
- Measure the outcrop geometry (follow on-site instructions).

SITE C

Equipment provided :

Thermometer and gloves.

Strips for indication of hardness, pH, nitrate concentration.

Measuring tape.

Peralatan

Termometer dan gloves

Strips/tabel untuk indikasi kekerasan batuan, pH, konsentrasi nitrat

Petunjuk pengukuran

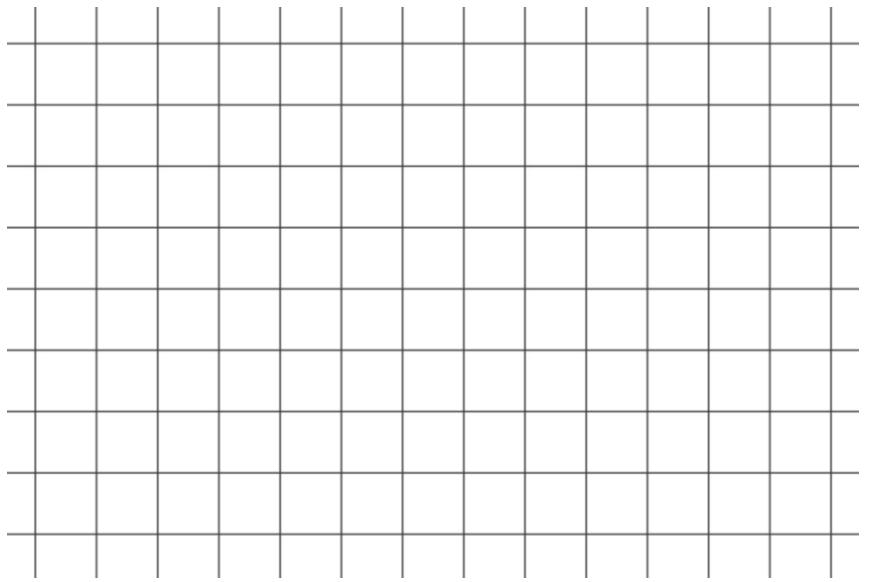
Some instructions for the observation :

Instruksi obsevasi





Drawing of the site :



- Determine the temperature of water in the river and « source ».

Your notes :

- Determine the temperature of waters in the river and (sources)
- Estimate the difference in altitude between the river and the « source ».
- Depending on the context, measure the water flow at several points.

- penentuan suhu air sungai dan beberapa sumber lain
- estimasikan perbedaan ketinggian diantara lokasi sumber air sungai dan sumber air lainnya
- Tegantung pada harga pengukuran aliran air pada beberapa titik



SITE D

Necessary Informations :

The rock at this outcrop is dated to the lower Bathonian. It has been known since antiquity and extracted for works of art.

Determine the rock category (e.g. sedimentary, metamorphic, magmatic)

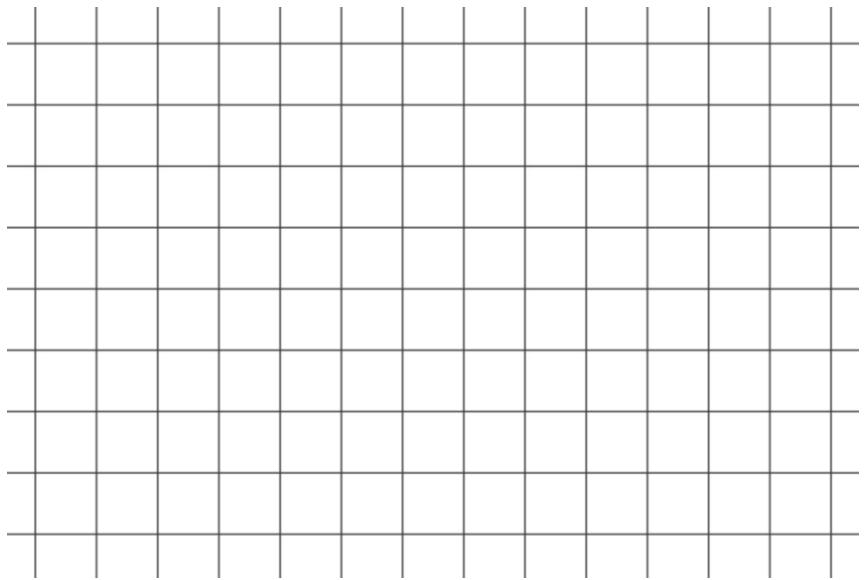
- Accurately identify the rock (e.g. limestone, granite, schist, etc...).
- Take notes and draw a labeled outcrop diagram.

Batuan pada singkapan umur Bathonian bawah. Itu akan diketahui sejak antiquity and extracted untuk barang seni

- Determinasi/tentukan kategori batuan (contoh batuan sedimen, metamorfik, magmatic/batu beku)
- Identifikasi lebih detail batuan (contoh batugamping, granite, sekis)
- Catatlah, dan gambarkan sketsa dan berilah label pada diagram singkapan.



Drawing of the site :



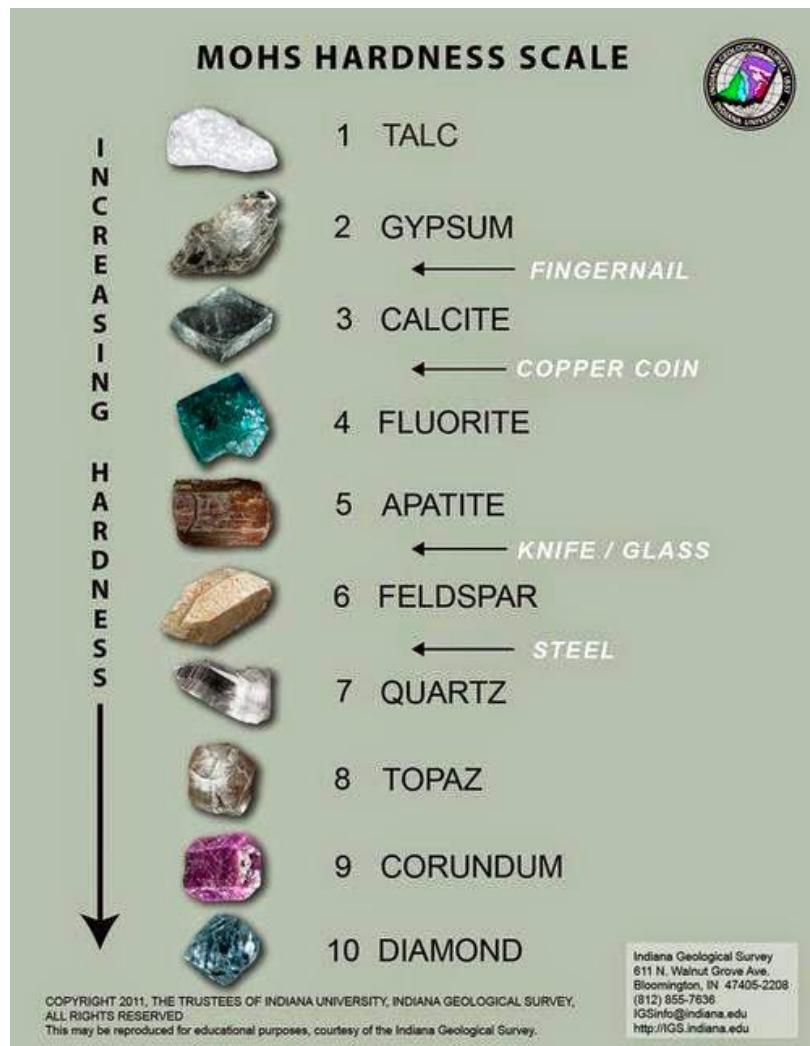
Some instructions for the obsevation :

Your notes :



From the Museum of Ceramic of Rio - Artwork dated to the 18th

Useful complementary documents.



What are the Cargneules ?

Cargneules are a yellow-brown carbonate breccia with numerous cavities, which form due to dissolution of dolomite or limestone. The cavities form by reaction with copper sulphate solutions. High-pressure fluids, formed from dissolution of Triassic gypsum at depth, are transported along microfractures resulting in brecciate carbonated rocks.