

DNHG Full-day Geological Trip from Dubai to Kalba Friday 17th January 2014

Jean Paul Berger will lead the following geological trip on Friday 17th January 2014

A trip across geological signatures of plate tectonics movement : the closure of Tethys Ocean in UAE seen from Dubai to Kalba

An introduction to the structure and geology of the ophiolite thrust sheet (or "nappe") which makes up most of the Hajar Mountains. Drive and explore a cross-section from the mountain front at Jebel Fayah to the top of the thrust sheet in Wadi Hiluw. This region represents the "signature" of the closing of the Tethys Sea that separated Arabia from Asia during most of the Mesozoic Era.

■ Details

- **When** : on Friday 17 January 2014.
- **Starts at meeting point** : **9:00 am sharp**.
- **Meeting point** : Emarat petrol station located at Al Qalaa. This is the first petrol station on Kalba motorway Nex Emirates Road towards Kalba (N 25° 14' 03,63 - E 55° 34' 26,1"). Refer to Google map provided in document list below.
- **Approximate duration** : from 9.00 am (meeting point) to around 6.30 pm (return Dubai). Anybody that would come back earlier, may leave the group at convenient time (easy way back to Dubai on the motorway from Kalba)
- **Return** : around 5.00 pm. Keep the Google map printing with you to have a safe return to Dubai, as we won't make a convoy coming back.
- **4x4** : 4WD recommended and required to access to the last stop.
Please come with a full tank of fuel or fill up at the meeting point.
- **Trip leader** : Jean-Paul Berger
 - Contacts - jp.berger@jpb-imagine.com - Mobile 050 729 34 68
- **Food / Lunch** : at around 1.00 pm in a wadi near Munai. You must take your own picnic and enough water for the whole day (minimum 2 liters per person).
- **Clothes / equipment** : hat or other sun protection, sun cream, sun glasses, sturdy footwear, camera, magnifying glass, binoculars and printed documents provided on this web page, ...
- **Group** is limited at 22 participants / 7 cars. Please do not forget that it's always better to share cars to make the convoy as small as possible.
- **No borders or check points crossed**, however it is always good to keep your ID with you, just in case.

■ Trip documents to consult and preferably download

- **Map of the trip**
 - To be used with Google Earth - [Download kmz file](#)
 - Picture from Google Earth - [Download](#)
- **Jebel Fayah a Miocene eroded anticline**

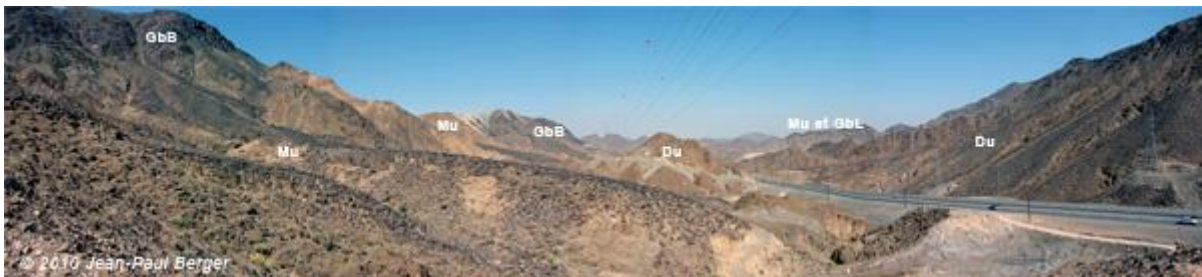
- Introduction



- geological map - [Download](#)
 - Simplified geological map - [Download](#)
 - Satellite picture of Jebel Fayah - [Download](#)
 - Stop 1 - Jebel Mileiha - A view on the piedmont
 - Satellite picture of Hajar piedmont - [Download](#)
 - **New !** - A flight on Google Earth (just move with the four arrows on your keyboard : up to move towards Kalba, down towards Dubai, left towards RAK and right towards Al Ain) - [Download kmz](#)
 - Stop 2 - The anticline seen from Jebel Buhays
 - A flight over the eroded anticline of Jebel Fayah Range with Google Earth from north (Jebel Mileiha) to south (Jebel Buhays) - [Download kmz file](#) (If the image is not clear at the first time, replay it)
- **Hajar Mountains (Aswad block)**

A travel through the ophiolite sequence (oceanic crust), from the bottom (the upper mantle) to the top (the basaltic pillow lavas)

 - Satellite view of the visited area crossing Hajar Mountains from west to east - [Download](#)
 - Extract of a geological map of the southern part visited in Hajar Mountains - [Download](#)
 - Pylon stop
 - Panorama view - [Download larger picture](#)



- Extract of geological map to analyse the view - [Download](#)
 - The layered Gabbros in wadi Hiluw (*below to the right*)
 - The Sheeted Dyke Complex in wadi Wahalah (*below*)



- The rooting zone of the sheeted dyke complex, a transition between high level Kalba leucogabbro and the dark diabases.



- The basaltic Pillow-lavas in wadi Wahalah

