

DNHG Full-day Geological Trip from Dubai to Dibba Friday 7th February 2014

Jean Paul Berger will lead the following geological trip on Friday 7th February 2014

The geology of the Dibba zone : signatures of plate tectonics movements

An introduction to the varied and complex geology of the Dibba Zone, the tectonic boundary between the ophiolite thrust sheet of the Hajar Mountains and the carbonate massif of the Musandam peninsula, including sediments formed on an ancient abyssal plain, submarine landslides and pillow lavas.

■ Details

- **When** : on Friday, 07 February 2014
- **Departure from Dubai** : around **8:00 am** depending on where you are in Dubai, to be at meeting point by 9:00 am sharp (to get an idea, it takes 35 minutes from Mirdif or Sharjah Corniche).
- **Route to meeting point** : Take new Sheikh Mohammad Bin Zayed Road towards Sharjah or new Emirates towards Motorway Sharjah - Daid and take motorway direction Al Daid.
Please make sure you make a petrol stop on your way to the meeting point (few petrol stations on our trip and it makes delay and some difficulties du park by beaking the convoy).
- **Starts at meeting point : 9:00 am sharp.**
- **Meeting point** : exit Sharjah Monument, Wildlife and Natural History Museum (N 25° 16' 32,8" - E 55° 41' 44,3") then go up to the monument (while waiting we get a panorama on the desert, but no coffe, snacks or conveniences available).
- **Approximate duration** : 9.00 to 6.30 pm (return in Dubai area).
- **Return** : around 5.00 pm to be back for around 6.15 - 6.30 pm in Dubai area. Keep the Google map printing with you to have a safe return home, as we won't make a convoy coming back.
Note: It will be possible to leave the trip at any point, for those who wish to return home early.
- **4x4** : is absolutely required as nearly half of the visit is on dirt tracks (no very difficult driving is involved and seats can be shared on 4x4 cars).
- **Trip leader** : Jean-Paul Berger
 - Contacts - jp.berger@jpb-imagine.com - Mobile 050 729 34 68
- **Food / Lunch** : at around 1.00 pm in wadi Kub or wadi Ya Kit. You must take your own picnic and enough water for the whole day (minimum 2 liters per person).
- **Clothes / equipment** : hat, sun cream, sun glasses, comfortable shoes, camera and printed documents provided the web page, ...
- **Group** is limited at 20 participants / 8 cars. Please do not forget that it's always better to share cars to make the convoy as small as possible. **Please make an effort to share cars as we are 42 instead of 20 !**
- **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 - Updated

- **Map of the trip**
 - To be used with Google Earth - [Download kmz file](#)
 - Picture from Google Earth - [Download](#)
- **Leaflet with all documents used during this trip** (password needed and already given on email) - [Download](#)

■ The stops

- 1 - Presentation of Dibba zone & Paleozoic formations (*Rann formation from Devonian, East of Jebel Qamar South*)

Picture taken from Rann quartzite formation overlooking wadi Aym terrace and the main "Dibba zone" formations



- 2 - Wadi Aym - Terrace



- 3 - Typical aspect of "Dibba Zone" : an exemple of mixed formations pushed and overlaped in a small area, around **Jebel Qamar North and wadi Kub** (*serpentinite from bottom of oceanic floor, Permian - Triassic limestone from Jebel Qamar (Oman Exotics), radiolarian cherts from oceanic floor sedimentation, Kub mélange from obduction and Metamorphic rocks*)

From left (South) to right (North) : Jebel Qamar South, Wadi Aym Terrace, Serpentinite, Jebel Qamat North



Serpentinite from wadi Aym Radolarian cherts from Wadi Kub



- **Overthrust** : a sign of convergence (not seen this time, North side of Jebel Qamar North, now partially fenced) - [Geological site](#) (explanations in french)
- **4 - Ultramafic pillow-lavas** Dibba volcanism of wadi Ya Kit (picture below) and [Geological site](#) (explained in french)



- 5 - Serpentinised harzburgite outcrop - Al Mihtaraqah (*pictures below*)



- **Panoramic view** towards Tawiyayn showing overthrust between various oceanic formations (*along E87 motorway on our way back to last stop, we will stop if we have time*)



- **6 - Jebel Agah : thrust fold in slope deposits**
During last reactivation, Jebel Agah overthrust fold has pushed from the right and uplifted

Shamal and Dhera formations (on the left). In the background, we recognize the platform limestone deposits. (proportions not respected, height is enlarged).

