



## ANNEXE 6- INVENTORY AND SIGNIFICANCE OF GEOSITES

### INTERNATIONAL INTEREST

- **Karst (VC01.01, VC01.02, VC02.01, VC02.02, VC02.03).** The Spanish law: Ley 33/2015, of e September 21, that modifies the: Ley 42/2007, of December 13 of Natural Heritage and Biodiversity. It sets as Spain geological contexts of global significance karst systems of the Peninsula
- **Aguilar limestone Formation (VC07.01).** These lacustrine carbonates are of great importance for the Project because probably constitute the accumulation of fossil lacustrine carbonate deposits thicker worldwide.
- **Ubierna Fault(VC09.04).** Important faults bounding the SW margin of Basque Cantabrian Basin. The entire set is an example at international level of a strike-slip fault superbly exposed (Pujalte and Hernandez (1997), Tavani *et al.* (2011)).

### NATIONAL INTEREST

- **Karst VC01.03, VC03.01, VC03.04.** One of the most spectacular is the Karst landscape. Martin Duque *et al.* (2010) emphasize the importance and uniqueness, of national significance, of the Street Karst (Ruiform Karst) of Las Tuerces and the aligned doline field of Lora de Valdivia.
- **Ornithópod fossil VC06.02.** Pereda Suberbiola *et al.* (2006) describe the skeletal remains of an ornithopod dinosaur found in Arcera Formation (Cabuérniga group). These remains support the presence of *Camptosaurus* in the basal Cretaceous of the Iberian Peninsula and represent one of the few citations from this ornithopod group in European formations of this age.
- **A fern-bennettitalean floral assemblage in Tithonian-Berriasian travertine deposits VC06.06,** “Late Jurassic macrofloras are globally scarce and have not previously been reported in Spain. Hence, the Aguilar Formation macroflora provides valuable information on the coeval phytogeography and palaeoclimate of southwestern Europe. Furthermore, the lack of floras observed so far in palaeotravertine deposits older than Pliocene in age makes this macroflora exceptional”.
- **Ebro canyons VC05.03,** for its geomorphology, main reason for its declaration as Natural Park.
- **Orbaneja VC05.05,** spectacular tufa building
- **Important and complete Stratigraphic cross section:**
  - o **Jurassic section** VC07.02, VC07.05
  - o **Cretaceous section** VC07.06
  - o **Cretaceous-Tertiary Contact** VC08.02
- **Ubierna fault and associated structures** VC09.02, VC09.03, VC09.06, VC09.12, VC09.13
- **Diapiric structures** VC10.01, VC10.02. Excellent Diapiric structure where you can see all the typical elements of this type of accident
- **Ayulengo oil field** VC11.01, VC11.02: Even as a very small field is having international and national repercussions and geological and engineering visits. It is a good example of a petroleum system.

### EDUCATIONAL INTEREST

All these points have been highly valued from the educational point of view for the following reasons:

1. The quality of the outcrops is very high.
2. They show clearly each of the elements that characterize each of the points form.



- 3. These Geological Sites have a very spectacular and lend themselves very easily to teaching**
- 4. They have very good accessibility by facilitating access to school groups**
- 5. Illustrate curricula at various levels of the education system**
- 6. Some of them are already being used in educational activities**

VC01.01, VC01.02,

VC02.01, VC02.02, VC02.03,

VC03.01

VC04.03, VC04.04, VC04.07, VC04.08

VC05.01, VC05.02, VC05.03, VC05.04, VC05.05,

VC06.04, VC06.05, VC06.09, VC06.11,

VC07.01

VC08.07, VC08.08

VC11.01

VC12.01, VC12.02, VC12.03, VC12.04, VC12.05, VC12.06, VC12.07, VC12.08, VC12.09, VC12.10, VC12.12,  
VC12.13, VC12.16