



Arizona Rocks 21

Text and photos by Ray Grant

Chert is fine-grained (cryptocrystalline quartz) that is commonly found as nodules in limestone or as bedded deposits. It is considered a chemical sedimentary rock. Sometimes other names are used, black chert is often referred to as flint and red, brown, and green chert may be called jasper (not all jasper is sedimentary in origin), but chert is the common preferred name for the sedimentary rock.

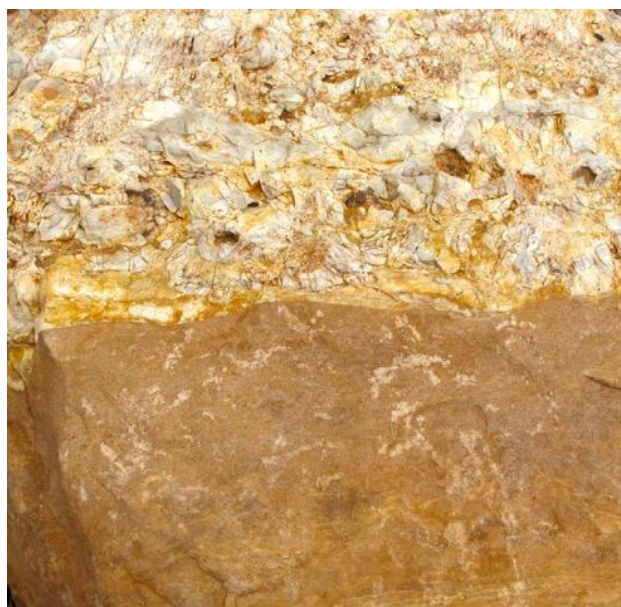
Chert seems to form in several ways. Some may be directly deposited as silica gel on the sea floor, some may be recrystallized silica from diatoms and radiolarian that have silica shells, and other chert may form from replacement of the limestone by silica rich solutions.

In Arizona, chert is common. It is abundant in both the Kaibab and the Redwall Limestones. As these limestone formations weather the chert is much more resistant and is left on the surface, and can be found on the Colorado Plateau and in southern Arizona where ever these formations are present.

There are a few places where banded iron formation (chert and hematite) is found in the Arizona Precambrian rocks.



Cherts weathering out of the Kaibab Limestone near the Grand Canyon



Chert layer in the Kaibab Limestone (chert on top, limestone on bottom)



Zebra agate or zebra stone from Payson is chert from the Redwall Limestone (Photo by Lynne Dyer)