International Symposium on Uranium Raw Material for the Nuclear Fuel Cycle: Exploration, Mining, Production, Supply and Demand, Economics and Environmental Issues - IAEA CN-216

Contribution ID: 221

Type: Poster

Focus on uranium research in Senegal

Wednesday 25 June 2014 17:00 (1 minute)

Two periods stand out in the history of mining exploration for uranium in Senegal

- The period 1957 1965 is in the context of a general inventory of the uranium potential of Africa, which is also at this time that large deposits of Niger and Gabon were discovered;
- The period from 1973 to the present, is characterized by surveys more focused on specific topics such as Birrimian Superior Precambrian Sedimentary, Secondary and Tertiary Phosphates. The collapse of uranium cots that began since 1980 calls into question the validity of these surveys on areas away from the coast and lack of infrastructure and forces to eliminate targets where there is little hope of finding high enough concentrations .

1.1 PERIOD 1957 1965

The first work undertaken by the Office of Senegal the French Atomic Energy from 1957 to 1961, were part of a systematic aerial survey of West Africa covering Senegal, Mali, Upper Volta and Niger.

It is during these flights that was highlighted aerial radiometric anomaly SARAYA inside the window base Kédougou (South East Senegal). His study led to the discovery quickly index SARAYA itself. Plans meters and the number of 14 trenches and geochemical samples were executed and two types of anomalies highlighted: - One in a fracture N130 with yellow products (1700 c/s AVP);

- The other in a white syenite calcite (8000 c/s SPP2).

At the same time, ground controlling other airborne anomalies was undertaken, in particular through geochemical sampling and small wells research. Such as geochemical anomalies were detected (Dalafinn site for example), usually associated with lateritic.

However, in 1961, the EAC took the decision to suspend the study of anomalies window Kédougou and will be undertaken in this area until the resumption in 1974.

In 1966, as part of a joint study Mauritania Senegal, teams ECA also undertook systematic radiometric study of continental sedimentary basin of the Ferlo (Northern Senegal) and the bank of the Senegal River; this work is furnished no interesting result.

1.2 PERIOD 1974-1982 RECONVENED

On 29 May 1974, the Minister of Development of the Republic of Senegal spoke to Mr. Administrator General of the CEA became General Atomic Company Materials (COGEMA), a letter requesting to consider the resumption of uranium research.

On affirmative response, a research permit from the Oriental Senegal 38600 km $^{\rm 2}$ was awarded Nov. 27, 1974 Uranium research was conducted in eastern Senegal.

These studies have been devoted here the study of Precambrian and Cambrian series Higher

COGEMA has extensively explored uranium in eastern Senegal in the period 1975-1985. The drastic drop in the price of uranium in the context of rather mixed results (resources of the order of 2,000 tons of uranium) leading to discontinuation of the exploration program.

The uranium exploration has been revived until 2007, thanks to the soaring price of uranium, the license of the Junior South African URANIUM for Saraya East, was purchased the same year by AREVA.

Author: Mr KANOUTE, Mamadou (Ministry of Energy, Senegal)

Presenter: Mr KANOUTE, Mamadou (Ministry of Energy, Senegal)

Session Classification: Poster Session

Track Classification: Advances in exploration and uranium mineral potential modelling