

Oil-gas content of volcanogenic-sedimentary rocks

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Oil-gas content of volcanogenic-sedimentary formations in some areas (green tuffs of Yapan) is predetermined by conditions of origination, accumulation and post-sedimentary transformations. The following factors are favourable for oil - gas accumulation in these complexes: 1) episodically acting volcanoes promote the repeated alternation of rapid supply of hot volcanites into the basin and slow accumulation of cold sediments, cooling of pyroclastics and warming of environment, repeated alternation of changed volcanites and sedimentary rocks; 2) lithologic pinching out of tufogene rocks, typical for zones remote from volcanic hearts, is favourable for oil - gas accumulation; 3) pyroclastic rocks, originating in great depths with high temperature, pressure and reductive ability of chemical elements, accumulate great energy. Thus, pyroclastics in very opposite outward conditions is undergone the intensive halmyrolysis. As a result zeolitic minerals - clinoptillolite - crystallize in beds' basic part; analcime with silica or montmorillonites - in ashes of upper part. It can be considered as genetically interrelated system "reservoir-cap rock"; 4) lithogenic reactions of volcanic tuffs transformation, and then stage dehydration of products of their change with which the main phases and later stages of oil-gas formation coincide, are characterized by heat energy absorption. While syntheses of new-formed minerals the heat emission takes place, enough to transform the organic matter into hydrocarbons; 5) on the Lesser Caucasus (Tarsdallyar, Samgori) the industrial deposits of oil and gas had been discovered in deeply-seated volcanogenic-sedimentary rocks of the Middle Eocene; which may be in the underlying Upper Cretaceous deposits similar in composition