Early Oil Explorers in Italy across the '800 and '900: The North Maiella-Tocco Casauria Oil Province Case Histories (Abruzzo - Italy)

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Abstract

In this research we investigated the story of the first oil explorers that, since mid '800 through first half of '900, invested in the bitumen/oil extraction and production in the Abruzzo region (Central Italy), in particular in the area between the Apenninic chain front to the West (Tocco Casauria oil spring), and the Majella mountain to the East (bitumen reservoirs), where oil seepages occur over extended portions of land. The area was a well-known petroleum province since the antiquity: archeologists found 'bricks' of bitumen dating back to the Roman age; and, medieval chronicles report about "oleum petronicum", sold to the travelers coming from continental Europe.

These surface evidences of an active oil system triggered a renewed interest in the second half of '800, when improvised wildcatters, oil companies and foreigner investors came in this region, years before the rationalization of the oil activities in Italy: any of those actors had a role in the -slow and difficult-; development of the modern oil industry in Italy.

In particular, in the early 1860s, after centuries in which oil mining in Abruzzo was an unchanged craft activity, new businessmen purchased the rights of exploration; but, still too risky to undertake expensive drilling operations. The need to unveil the prospectivity of finding hydrocarbons, and to collect scientific evidences on the quantity and localization of hydrocarbons in the subsurface, pushed them to involve geologists from the Academia: few years after this farsighted intuition the area developed into an important oil province that represented for almost 90 years the second largest oil district in Italy.

Our work is supported by the collation of a heterogeneous set of sources from Italian archives and libraries: we reconstructed the stories of the geologists that firstly assessed the area, tried to decipher the mechanism of hydrocarbon accumulation, and finally advised where to place what is supposed to be the first oil well drilled with mechanical means in Italy in 1864.

The document findings and the evidences still visible at the surface (abandoned mines, pits, quarries, facilities ruins) are the undisputable witnessing of the cultural richness and historical relevance of the oil and gas industry in Italy, from both geological and technological point of view. Finally, this amazing story is not only full of learning experiences but also represented the base of the successful oil industry efforts in this region in the subsequent years.