

**PETROLIA, CALIFORNIA'S FIRST OIL FIELD — A CENTURY OF DISAPPOINTMENT**

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**ABSTRACT:** The *Petrolia* oil field, the first to be developed in California in the 1860's, attracted considerable interest and investment among oilmen because of the abundance of oil and gas seeps throughout that region. The 'Union well', first producing well drilled in California in 1865, yielded some thirty barrels of high quality oil, but production soon slowed to one barrel per day and the prospect was abandoned. However, over the next half-century exploration and drilling continued throughout the region with little or no success. Although touted as a potential major oil district, the highly deformed Franciscan Complex basement rocks, that were structurally imbricated with Neogene marine strata as part of an actively growing accretionary prism atop the subducting Farallon plate, did not provide adequate reservoirs. Rather, oil and gas seeped to the surface along shear zones. The tectonostratigraphic setting of California's only oilfield unequivocally located in an active subduction zone precluded its success.

**INTRODUCTION**

*There is no doubt but that the richest oil fields in the world are in the Mattole country. (Humboldt Times, 9 August 1900).*

Following the successes of the Drake discovery well in Pennsylvania in 1859, oilmen developed a keen interest in California crude oil for the production of kerosene (Stalder 1943, p. 75). The oil industry in the East had recovered from the collapse in 1861 and 1862, due to reckless speculation and over-production, and capitalists were again investing (California State Mining Bureau, 1888). Excited by an 1861 report that San Francisco oilmen were planning to develop oil properties in the region, a rush of investment spurred the formation of ...altogether, at least 54 different oil companies ... in a little more than one year. Some were organized in Humboldt, others in San Francisco. The total desired capitalization for 20 of these companies amounted to more than \$7,250,000 (Raphael and House 2007, p. 194). Thus the **Petrolia** [optimistically so-named at the time] area of southern Humboldt County (Fig. 1) attracted considerable attention. Local amateur historian W. E. Rosco (1940, p. 64), in a transcribed interview, stated that in 1864 the town site for Petrolia was established and plans laid for oil boring, *The oil prospect was the main topic of discussion when the town of Petrolia was established.*

**PROSPECT IN THE 1860'S**

Exploration was focused on areas of oil seepage. Between 1861 and 1864 several unsuccessful shallow wells were drilled in the Petrolia area that produced only minor amounts of oil and gas from shallow [less than 260 feet] depths. Oil springs ...were developed by means of trenches and shallow pits, allowing the oil to collect on the surface of the water

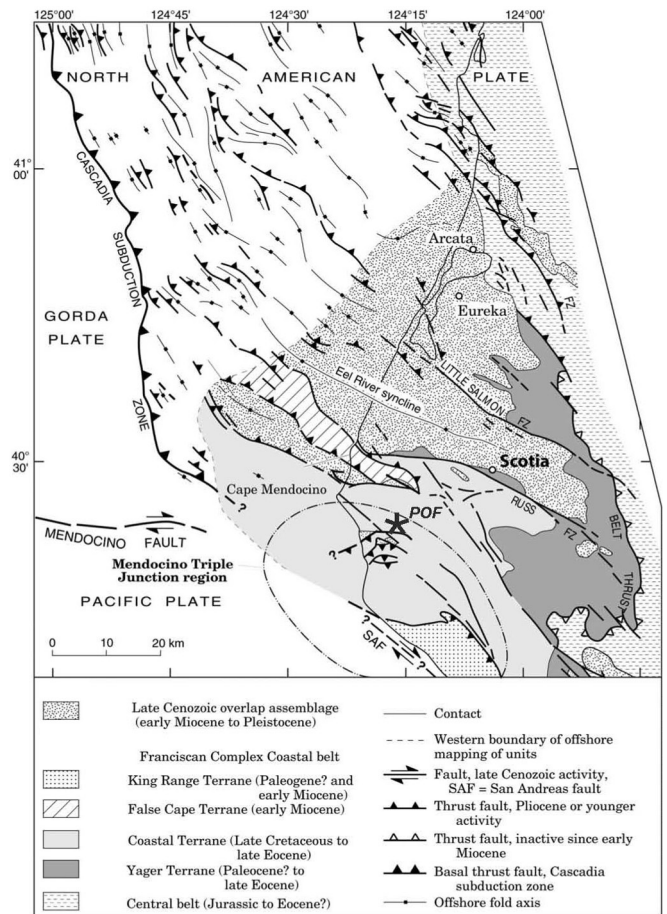


Figure 1. Generalized geologic and tectonic map of the Mendocino triple junction region, northwest California (modified from Aalto et al. 1995, Fig. 2). The asterisk shows the approximate location of the Petrolia oil field (POF).