

# Oil discovery in eastern Peru

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## Oil Discovery in Eastern Peru

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On March 10th. 1957, a wildcat drilled by the Compañía Peruana de Petróleo «El Oriente», Maquía 1, discovered oil at a depth of 651 m (2136'). Tests over a period of 72 hours established that the well produced about 600 bbs/day through a 6 mm bean of 39° API (.830 sp. gr.) with 14 atmospheres pressure on the tubing.

The location site is 6 km east of the town of Contamana which lies on the right bank of the Middle Ucayali River. The operations started in the Red Bed group quite deep in the Lower Tertiary, and encountered the top of the Cretaceous at about 500 m. The oil is derived from the central sandstone portion of what is called throughout the Peruvian Selva the Sugar Sandstone, of Upper Cretaceous age.

The well is drilled to the total depth of 1623 m and a 7" casing was set at 819 m. Then the well was plugged back to 670 m and casings were perforated (by Schlumberger) from 651—659 m. The formation penetrated is thus a section of the lowermost tertiary Red Beds, followed by the Sugar Sandstone, the Chonta and the Agua Caliente series of the Cretaceous, whereupon the drill presumably reached the underlying Paleozoics.

The well is located on a smooth, fair sized dome with a steeper western flank and a more pronounced southern plunge, sitting near the top of a secondary fold, which trends approximately parallel to the main Contamana Mountains uplift. This structure has been known for considerable time as the Cachiyacu <sup>1)</sup> anticlinale, and was first reconnoitred by the «Comisión geológica amazonica» of the Peruvian Government, headed by Douglas Fyfe in 1942, and after fotogeological studies was detailed by ground control by Werner Rüegg in 1946 for the Cia. Peruana de Petróleo «El Oriente». As regards the stratigraphic sequence, facies conditions, tectonic pattern and orogenic display of the local environment and the Upper Amazon embayment as a whole, we simply refer to the selected literature mentioned at the end.

A second well is now operating some 500 m south of Maquía 1, which probably also drills within the bounds of the true culmination. It is the intention of the Company to prove up the structure as rapidly as the materials are available.

The discovery of this wildcat situated, as it is, some 250 km north of the Ganso Azul field on the Pachitea River, is definitely encouraging for the oil prospects of Eastern Peru, and together with the general geologic evidence warrant promising reasoning and prediction for a great portion of that Andean foreland belt. The find is the first one after many years of tenacious, expensive and adverse investigation,

<sup>1)</sup> Cachiyacu is the local river which cuts through the structure from east to west. The indigenous name means «saltwater», a designation especially well applied due to the existence indeed of many small and tiny saltwater springs scattered in the jungle region and which greatly called the writer's attention.

inclusive the perforation of nine dry holes by the interested Companies since the coming in of the Ganso Azul field in 1939. Apparently the origin of the oil is in the Paleozoic which opens the main outlooks east of the Ucayali-Urubamba towards the craton, although the reservoir rocks may be of different age (Agua Caliente in Ganso Azul and Sugar Sandstone in Maquía).

The nearby, excellent shipping conditions offer this high grade oil an advantageous, readily available market in Brazil.

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