BERLIET T100

Berliet T100 - The Giant for an Enormous Task

Berliet manufactured the largest truck in the world at the time in 1957. Called the T100 6X6, it was fitted with either the 600 hp (447 kW) or 700 hp (522 kW) Cummins V12 engines. This is the story of the two giants sent to the Sahara to help with the exploration of oil.

Saharan Oil... a Black Gold that must be Earned!

At the end of 1948, after several years of research, a geological expedition to the Eastern Sahara revealed clues allowing prospecting to be attempted. Several organisations were then created. The Cie des Pétroles au Sahara (CPA), a subsidiary of Shell, has joined forces with the state-owned company (Régie Autonome des Pétroles) to set up CREPS (Cie de Recherches Petrolières au Sahara). At the same time, SN Repal (National Company for Petroleum Research and Exploitation in Algeria) was partnering with Cie Française des Pétroles Algeria (CFPA). After extensive investigations, these new companies identified areas likely to contain significant deposits and they obtained drilling permits for hundreds of thousands of square kilometres.

Oil drilling being very expensive, it should not be done at random. Boring the ground in depth reveals the geological layers in which pockets of oil or gas may be found. Different magnetic or electrical methods are used. In the Sahara, SN Repal and CFP approached the Cie Générale de Géophysique (CGG), which used an innovative process: seismic prospecting.

The 1958 Berliet "Gazelle" from the CGG was equipped with a seismic sounder. A miniature explosion using dynamite 15 to 20 m below the surface sets off a mini earthquake that allows probes placed on the surface to calculate the time it takes for reflected waves to return. The result depends on the presence or absence of oil slicks.

Probes and drilling platforms were installed on promising sites but in these inaccessible sandy areas, the installation and transfer of equipment requires expensive handling and transport

The figures for Exploration in the Sahara

The prospecting area represents 300,000 km2. 2.75 billion francs were spent from 1952 to 1962 for the search for deposits.

The Hassi Messaoud oil field is the largest in the Sahara (250 and 450 million tonnes)

Five renewable years, this was the period during which a holder is entitled to a concession if he discovers an exploitable deposit.

At the end of the five years, the concession holder gives up half of the area and is only entitled to renewal if he has fulfilled his financial commitment and undertakes to double the geographical intensity of his effort.

Difficult Prospecting... Crowned with Success

Between 1952 and 1955, the drilling carried out was quite disappointing. It was CREPS which, in early 1956, discovered the first exploitable deposits in Edjeleh and then in Tiguentourine. For SN Repal and its partner CFPA, no results are conclusive despite multiple trials. At the end of summer 1956, on the eve of being forced to surrender their prospecting





permits, they decided on two new boreholes and it was the "Jackpot"! SN Repal discovers the giant Hassi Messaoud oil field, while SN Repal unearths another huge field - of wet gas this one - in Hassi R'Mel. The Hassi Messaoud and Hassi R'Mel wells reveal fabulous reserves. Many other surveys in these regions will be equally promising. These two sites still represent 80 percent of Algeria's hydrocarbon reserves today.

Heavy Transport Across the Dunes: to Cross or Bypass?

Initially, the search for oil in the Sahara was limited to the regions located on the edges of the large ergs (areas where sand accumulates in the form of high dunes) because the trucks loaded with heavy drilling equipment could not cross them. The prospecting sites, accessible only to light vehicles, must then be developed at great cost with access tracks. Expensive to create, difficult to maintain, these tracks sometimes bypass obstacles over considerable distances.

Before 1955, there was also little specific heavy equipment for transport to desert areas. The companies therefore had to use vehicles that have already proven their worth on drilling sites, particularly in the Middle East. These are the American Kenworth 853 6x6 trucks, capable of carrying loads of 25 to 30 tons. The first of these landed in Algiers in 1953 and were used intensively.

Fitted with oversized tires, the Kenworths have satisfactory crossing abilities in sandy areas. However, their pneumatic mounting creates additional strain on the transmission and causes significant wear.

A Desert Ship for a Sea of Sand

Paul Berliet therefore planned to design a giant truck, capable of transporting heavy indivisible masses through inaccessible sandy terrain. The idea was born in December 1956, when he flew over the western part of the Sahara "On this vast" ocean "rippled by high dunes - the Barkhans - a high-level vessel was needed, endowed with suitable crossing capacities to bring its cargo to port..." (Paul Berliet)

Between January 1957 and August 1958, Berliet built two T100 6x6, specially designed for the Sahara. After its presentation at the 1957 Paris Motor Show, the T100 n ° 1 participated in several commercial events in France and abroad.

Between May 1958 and September 1959, it stayed at the Lyon plant to receive a more powerful Cummins engine, to be lengthened by 1.80 m and to undergo some bodywork modifications (the bonnet, in particular). In 1959, it was painted red for the Geneva and Frankfurt Salons. On September 15, 1960, he was sent to Algeria, on the occasion of the inauguration of the "Saharan T100 base" in Ouargla. Put to work in the large Erg Oriental and used, among other things for the transport of barite, its platform is fitted with side rails.

Unused since the 1970s, it is still in Algeria. In 2011, it could be seen in Hassi-Messaoud, displayed on a roundabout in front of the site of the National Wells Works Company (ENTP).

Configured as an oil platform capable of accommodating Gin-pull and winch, the T100 n ° 2 arrived in Algeria on October 10, 1958, two years before its older brother. The first Saharan tests made it possible in particular to test the transmission and the "special sand" tires, the very low pressure of which is comparable to that exerted by the foot of a camel. Assigned to the removal of oil rig parts and the transport of barite, it became the property of the Algerian State in 1962, just like the T100 n ° 1. Both are assigned to the SONATRACH DTP in Hassi-Messaoud. Gifted to Paul Berliet by the Algerian Minister of Energy in 1981, the T100 No. 2 was repatriated to France. Since 1984, he joined the vehicle conservatory of the Berliet Foundation.

After a series of tests carried out in January 1959, around Touggourt and in the El Oued area, the Deviq company used the T100 No. 2 for the relocation of a drilling platform south of Assi-Messaoud. This operation was carried out between February 3 and 6, 1959. The Berliet specialists Marius Mora and Michel Proton took part, among others, as well as Joseph Caïola, Berliet tester in the "Special vehicles" department.

The Return of the Giants

Since the 1970s, the two T100s had been immobilized in Hassi-Messaoud. In 1981, the Algerian state donated the T100 No. 2 to Paul Berliet, very young President of the Marius Berliet Foundation. A Renault V.I. technical team goes to the site to proceed with the repatriation.

The vehicle having remained in a good state of conservation, a few weeks will be enough to make it again maneuverable and presentable, ready to travel.

The body, preserved by the dry heat of the desert, is sandblasted before being repainted in the original beige color.

After its arrival in France, the main engine of the T100 was overhauled at the Vénissieux plant: it was therefore driving on its own and the colossal vehicle then joined the Rochetaillée Automobile Museum by following a special circuitous route (130 km instead of 25). It was exhibited there for two years.

