

OIL IN GERMANY

HENRY LUDMER,
University of Toledo,
Toledo, Ohio

The subject "Oil in Germany" was and is of great importance to us because it was and still is a very essential part of Germany's war potential as well as of her peacetime economy.

World War I revealed the importance of oil to military operations. Lord Curzon made the long-remembered statement that the Allies floated to victory on a sea of oil. Marshal Foch added that in war a drop of gasoline is worth a drop of blood.

World War II clearly demonstrated the absolute necessity of oil in war. Not only did the want of it, the need of it, breed the force which attempted to obtain it, but it also played a leading part in the strategy of the victorious side. It is smarter to ground planes and put out of commission tanks by destroying their oil depots than to risk more men and machines by fighting them. Therefore all information concerning the natural and synthetic oil of Germany was classified information and hard to get. Some of the data presented in this study could not be checked or rechecked because of lack of information from the Russian sector of Germany.

First, the geographic location of Germany's natural and synthetic oil, petroleum refineries, oil centers, firms, etc., will be described. Then an oil estimate will be made and finally the elimination of Germany's production of synthetic gasoline and oil will be discussed. It is beyond the scope and time of this study to describe the various processes (Hydronation, Hydrogenation, Carbonization, Bergius, Fischer-Tropsch, Winkler, and other I. G. Farben-processes) used in the production of synthetic oil.

It should be remembered that Germany lacked sufficient natural oil within her own boundaries to maintain her military machine and that even after gaining all the oil in Central Europe, she still lacked enough oil to wage a successful war. This lack was a direct stimulus to the experimentation in synthetics and the production of synthetic oil. Germany built a large number of synthetic plants, all of which were subject to raids during the war. The most important one of these synthetic plants was the Leuna Works at Merseburg. This plant was wrecked by allied bombing, but recently has been restored to 40% of its capacity. It is supplying gasoline to the Russian occupational forces now. Forty percent of the Leuna plant was completely destroyed and about 70% of it was unroofed. Leuna Works is a limited liability corporation whose stock was owned by the I. G. Farbenindustrie A.G. combine. Since Allied confiscation of the German assets of the I. G. Farben-combine, the title to the Leuna Works as well as to many other synthetic oil plants rests with the Allied control council for Germany. At present the plant is employing about 18,000 workers, about half of its wartime peak.

The situation in the other plants listed is similar.

I. NATURAL OIL.—Production of natural oil is centered in North West Germany at:

Nienhagen—Production about 300,000 tons per year.
Rietberg—Production about 300,000 tons per year.
Heide—Production about 50,000 tons per year.

Total production of natural crude oil in Germany for 1942 is estimated at 800,000 tons.

- II. **PETROLEUM REFINERIES.**—Total refining capacity in 1938 was 3,000,000 tons a year. It was centered in the Hamburg area and in the Hanover area.

A secondary concentration was on the Rhine and Ruhr, chiefly at

Emmerich.
Dortmund.
Düsseldorf.

Imports were also refined at Regensburg.

- III. **SYNTHETIC OIL.**—Germany's main source of oil supply. Principal synthetic oil plants:

<i>Location</i>	<i>Name of Plant</i>	<i>Estimated Annual capacity (1,000 Tons p. a.)</i>
Bergius—Hydrogenation Plants—		
Leuna—Merseburg.....	Ammonia Werke Merseburg GmbH.....	400
Pölitz—Stettin.....	Hydrierwerke AG.....	400
Scholven—Buer (Ruhr)....	Hydrierwerke Scholven Hibernia AG.....	350
Gelsenkirchen (Ruhr)....	Gelsenkirchen—Benzin AG.....	325
Troglitz—Zeitz.....	Braunkohle—Benzin AG.....	320
Magdeburg.....	Braunkohle—Benzin AG.....	300
Wesseling.....	Union Rheinische Braunkohlen Kraftstoff AG.....	250
Böhlen—Rotha.....	Braunkohle—Benzin AG.....	200
Lützendorf Mucheln.....	Wintershall AG.....	125
Welheim Bottrop (Ruhr)...	Rhuröl GmbH.....	100
Blechhammer (Silesia)		
(a) North.....	IG Farbenindustrie.....	750
(b) South.....	IG Farbenindustrie.....	750
		4,275

<i>Location</i>	<i>Name of Plant</i>	<i>Estimated Annual Capacity (1,000 Tons p. a.)</i>
Fischer-Tropsch Plants:		
Ruhland—Schwarzheide....	Braunkohle—Benzin AG.....	400
Lützendorf—Mücheln.....	Wintershall AG.....	200
Rauxel (Ruhr).....	Klockner—Wintershall AG.....	200
Homburg (Ruhr).....	Treibstoffabrik Rheinpreussen.....	200
Holteln (Ruhr).....	Rhurbenzin AG.....	130
Wanne—Eickel (Ruhr).....	Krupp Treibstoffwerke.....	130
Dortmund (Ruhr).....	Hoesch—Benzin GmbH.....	130
Deschowitz.....	Schaffgotsch'sche Benzin GmbH.....	110
Kamen-Dortmund (Ruhr)...	Chemische Werke, Essener Steinkohle AG.	50
		1,550

- IV. **OIL CENTERS.**—The following list indicates the storage capacity available at the principal oil storage centers. In each of the town areas it is distributed over a number of individual plants, but in no case is it possible

to give even an estimate of the actual quantities which are likely to be in storage.

<i>Place</i>	<i>Capacity in Tons</i>
Berlin.....	68,900
Bremen.....	748,800
Bremerhaven.....	459,700
Danzig.....	5,800
Duisburg.....	66,500
Düsseldorf.....	31,800
Emden.....	43,500
Frankfurt-Main.....	141,200
Hamburg.....	1,361,200
Hanover.....	287,300
Kiel.....	737,300
Köln.....	14,000
München.....	69,000
Rostock.....	11,000
Stettin.....	187,000
Stuttgart.....	17,500
Wilhelmshaven.....	221,000
	4,471,500

The following underground army oil storage depots are definitely known:

<i>Place</i>	<i>Capacity in Tons</i>
Hitzacker (Lüneburger Heide).....	2,400,000
This depot consists of 114 "holes" or "departments," each of which contains five storage tanks.	
Farge (14 miles NW of Bremen).....	340,000
Nienburg (Lüneburger Heide).....	193,200
Loccum (Lüneburger Heide).....	15,600
	2,948,800

These figures are by no means complete, but they represent the locations of the principal depots. We may assume that the others were destroyed during the war.

V. MAJOR OIL FIRMS.

<i>Firm</i>	<i>Location</i>
Bremer Chemische Fabrik A. G.....	Klaffenbach (Erzgebirge)
I. O. G. Mineralöl-Raffinerie Herzog.....	München-Ottobrunn
Karl Pohlmann Mineralöl-Raffinerie.....	Kerbach (Kassel)
Teutonia Mineralöl-Raffinerie.....	Berlin-Rudow
Alfred Teves.....	Frankfurt (Main)
Hans R. Schroeter.....	Magdeburg
Deutsche Hydraulik und Präzisions-werke G.m.b.H.....	Berlin-Wittenau
Deutsche Gasolin A. G.....	Emmerich
Deutsche Vacuum Öl A. G.....	Oslebshausen
Mitag Deutsche Treibstoffe A. G.....	Regensburg
Nerag A. G.....	Misburg
Rhenania-Ossag Mineralwerke A. G.....	Königsberg (Pr.)
Shell-Floridsdorfer Mineralölfabrik A. G.....	Wein-Floridsdorf

The present capacity of these firms is unknown.

VI. OIL ESTIMATE.

It has been estimated that the Germans produce about 267,000 barrels daily now, while our daily production in 1946 was 5,070,000 barrels, plus imports of 370,000 barrels, totally 5,440,000 barrels. There is a tremendous demand for oil in Germany now and Germany has to rely heavily upon petroleum imports from the Middle East and other areas. Germany is forced to convert cars, trucks, etc., to charcoal and similar substitutes. The German nation is very poor in regard to its oil supply. In addition to it the most important oil fields and refineries are dominated by affiliates of the large oil groups, in particular Standard-Vacuum and Shell-group.

VII. GERMANY'S OIL AND THE FUTURE.

Briefly we have surveyed the oil situation as it stands in Germany today. We have seen that production is low principally due to the effects created by World War II. Our bombers destroyed or damaged oil installations from the refineries of Bordeaux to the oil fields of Ploesti. It will be many years before all of these installations are operating on a former capacity basis. On the other hand World War II developed and proved the value of synthetic oil.

In accordance with the Berlin Protocol of March 28, 1946, the Allied Control Council is to determine the amount and character of the industrial capital equipment unnecessary for the German peace economy and therefore available for reparations. All industrial capital equipment for the production of synthetic oil and gasoline is to be eliminated. But 14 lines later the same document states "Facilities for the production of synthetic gasoline and oil, synthetic ammonia and synthetic rubber, and of all ball and taper roller bearings, will be temporarily retained to meet domestic requirements until the necessary imports are available and can be paid for." There is a contradiction between both policies. On one hand we would like to eliminate Germany's war potential and on the other hand we are retaining there the most important war facilities.

We all know that oil is the raw material for a thousand purposes, the source of power in industry, the source of fuel and lubricants and that it must not be kept from or taken away from those who need it. The Atlantic Charter stated that all nations should have the right to trade and access to raw materials of the world whenever necessary to their prosperity. This applies to Germany too.

We also know that Germany will not be able to pay for oil imports for quite some time. Are Standard and Shell willing to accept Christmas toys for oil again as they had to accept them before World War II?

Should we let the Russians have the German facilities for the production of synthetic gasoline and oil? Soon after Anschluss German interests "legally acquired" title to all foreign and domestic oil properties in Austria. This acquisition is at present a cause of considerable concern to the four powers. Under the Potsdam Agreement the Russians were given the right to take German holdings in Austria as reparations. It is the opinion of the writer that such holdings can not properly be considered German, if acquired during the war. A restoration of all property rights to the prewar owners should be attempted. There must not be any transfer of facilities as long as domestic oil requirements are not met.

But at all times there should be a rigid control of all facilities for the production of synthetic gasoline and oil even though converted to civilian production, in order to ensure that these plants are not again used for war purposes. Elimination or transfer of the facilities mentioned do not seem advisable as such acts would cause considerable unemployment in Germany. Reconversion and control seem to be better solutions.

Amiable policy between nations on the subject of German oil cannot bring everlasting peace within itself, but it can be of great assistance, while lack of such an amiable policy can be a great hindrance to peace. All nations seek wealth. Oil is wealth. A proportionate sharing of it is essential to a lasting peace..

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