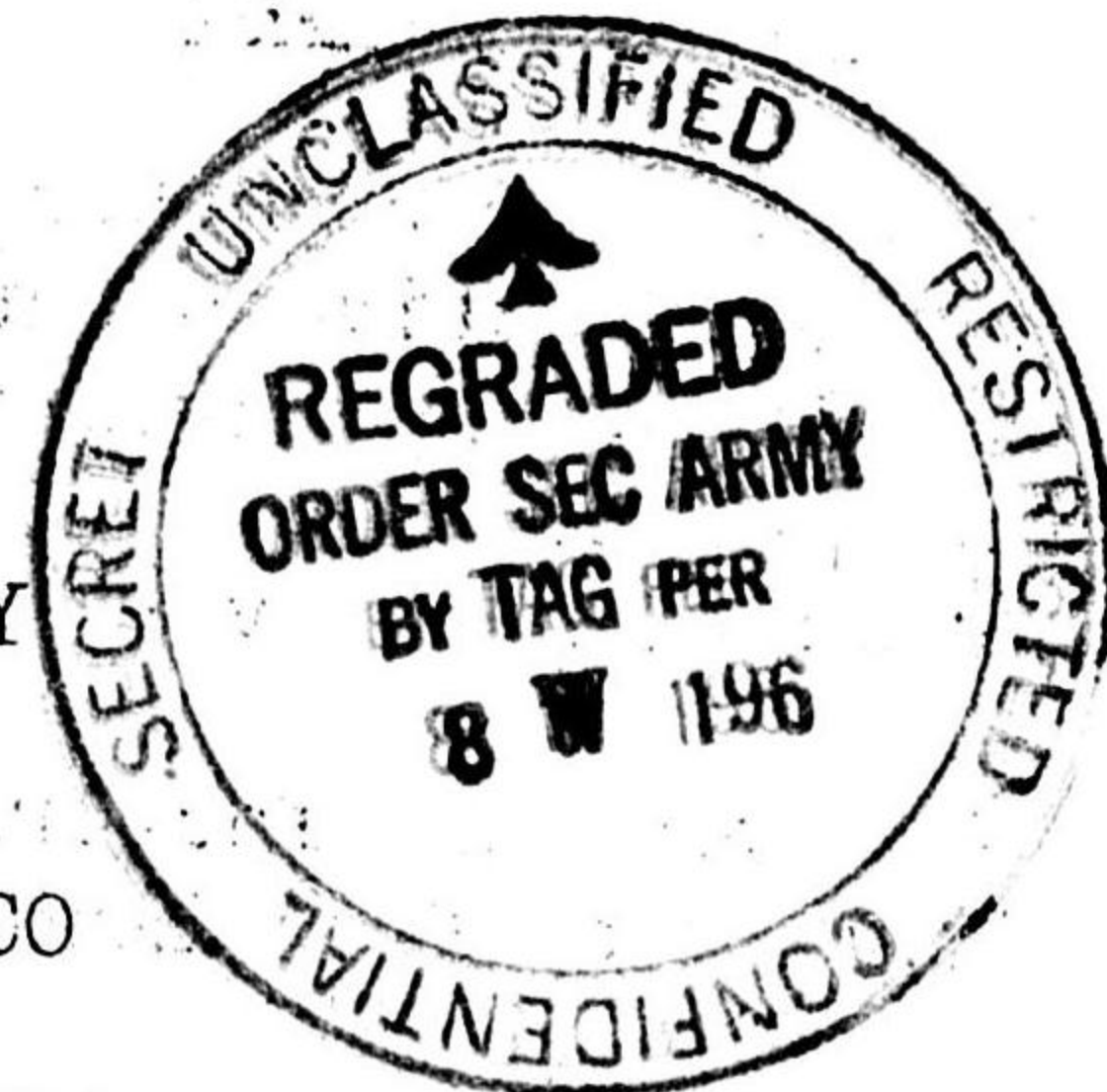


RESTRICTED  
HEADQUARTERS  
U.S. STRATEGIC BOMBING SURVEY  
(PACIFIC)  
APO #234  
C/O POSTMASTER, SAN FRANCISCO



PLACE: Tokyo.

DATE: 21 December 45

INTERROGATION NO. 529

Division of Origin: Military Analysis

Subject: Petroleum, Oil, and Lubricants

Personnel interrogated: Major TAKAHASHI, T. Army Ministry

Where interviewed: Room 805 Meiji Building.

Interrogator: Lieutenant Amos K. Smith USNR.

Interpreter: Mr. Harvey Colton

Allied Officers Present: Lieutenant O.N. Reitz USNR.

Summary:

1. Production of synthetic gasoline never amounted to enough to make plants producing it desirable bombing targets.
2. Although it had been planned to attain a maximum yearly production of 4,000,000 kilolitres the most ever produced in one year was 134,000 kilolitres.
3. The lack of technical "know how" in refinery construction was a major obstacle in securing a satisfactory volume of production.
4. The over-organized administration for control and allocation of oil led to confusion with the result that maximum use was not made of existing supplies and/or capacities.

R E S T R I C T E D

529-1



Q. It has been reported that the bombing of synthetic gasoline plants was ineffective because these plants were not in production as a result of shortages in catalyst raw materials such as cobalt. Is this true?  
 A. Production was very low but we had a sufficient stock pile of cobalt.

Q. What were the factors, then, that caused the slump in production?  
 A. There were four important factors:

- a. Shortage of transportation
- b. Lack of proper machinery maintenance
- c. Absenteeism
- d. Shortage of coal

Q. What effect did direct B-29 raids have on the synthetic?  
 A. It was not great. One low temperature carbonization plant was burned completely, and one hydrogenation plant. The Fischer plant (Miike) received 50% damage. The effect on total production was negligible.

Q. Of the four factors you have listed as being the most important causes of low synthetic gasoline production which do you consider the most important?  
 A. Of course it varied from plant to plant but overall the disruption of transportation was the greatest cause. In certain plants the coal shortage was the greatest limiting factor.

Q. Were these factors all results of air attack on allied industry, transportation, and urban areas?  
 A. I would say yes, definitely.

Q. Then the B-29 raids actually reduced production of synthetic gasoline although not by direct attack on synthetic gasoline plants?  
 A. That is true.

Q. Can you estimate total synthetic gasoline production by years for me?  
 A. I have approximate figures with me.

1942	-----	91,000	kilolitres
1943	-----	107,000	"
1944	-----	134,000	"
1945	-----	34,800	"

1945 represented five months production only.

Q. What had you planned as your maximum annual throughput?  
 A. In 1941 we planned to attain an annual production of 4,000,000 kilolitres.

Q. What were the reasons for the great disparity between your planned production and your actual throughput?  
 A. I would say the four reasons I gave you before, plus the fact that we were unable to build all the plants we had planned because of the shortage of steel.

Q. Isn't it true that you lacked the technical "know-how" to build an effective synthetic industry?  
 A. We did all right in the laboratory but when it came to actual production in the refinery we ran into trouble with high pressures and high temperatures. Our refinery construction was not good.

Q. In 1945 how was your capacity divided among synthetic processes?  
 A. Fischer-Tropach accounted for sixty percent; hydrogenation -- 2%; and low temperature carbonization---38%.



R E S T R I C T E D

INTERROGATION No. 529 (Cont.)

Q. Did actual production break down on the same percentage basis?  
A. No. Low temperature carbonization plants accounted for 30%; Fischer--15%, and hydrogenation 5%.

Q. Why didn't production follow capacity more closely?  
A. Two large Fischer plants were not operating. We could not finish the Kumoi plants because we lacked steel. The Amagasaki plant with a capacity of 40,000 kilolitres to be manufactured from waste gas available from the Amagasaki Iron Works was not in operation because the iron works was shut down.

Q. Can you give me the planned capacity, actual capacity, and throughput of the following Fischer plants---Miike Coal Liquefaction, Takikawa, and Amagasaki?  
A. Yes.

<u>Plant</u>	<u>Planned Capacity</u>	<u>Completed Capacity</u>	<u>Throughput</u>
Miike	40,000 kl/y	40,000 kl/y	20,000 kl/y
Takikawa	80,000	40,000	4,000
Amagasaki	40,000	40,000	-----

Q. How many iso-octane plants did you have and where were they located?  
A. We had three plants---Universal Oil products process---located at Tsurumi, Kawasaki, and Iwakuni.

Q. What was the yearly capacity for these plants?  
A. Tsurumi---2400 kilolitres, Kawasaki---4300 kilolitres, and Iwakuni ---4300 kilolitres.

Q. What was your actual production by plant?  
A. Practically nothing. They were all burned out by the bombing attack.

Q. Major Takahashi, In closing this interview, I should like to get your opinion on a matter not directly concerned with synthetic production but one with which you were intimately concerned and that is the overall administration of petroleum during the war. I have made quite a study of the organizational setup to control and allocate oil--the Cabinet Planning Board, the Army and Navy Oil Committee, the Fuel Bureau, the Material Mobilization Section of the Army Ministry, the Military Fuel Board, Air Service Board, and Ordnance Board, and it appeals to me that confusion must have resulted from the overlap of authority, and the unwieldy size of your organization. What is your opinion.

A. Yes, there was much confusion mostly resulting from bickering between the Army and the Navy. This not only reduced the efficiency of the Military but hurt the civilian economy as well.

R E S T R I C T E D