IMPORTANT. This document should be kept under lock and key. Most of the information which it contains comes from secret sources.

AO 230/1/Z Copy No.....32

NOTES OF ENEMY OIL INTELLIGENCE.
Economic Advisory Branch (F.O. & M.E.W.)

May 15th, 1945.
No.45/19

1. GERMANY: Oil and Gas Fields in Netherlands German Frontier Area.

The following preliminary reports have been received concerning oil and gas fields in the Ems Valley area.

A. 1. A brief technical investigation has been made of the BENTHEIM gas field, and of the DALUM, GEORGSDORF and EMLICHHEIM oilfields.

2. The Bentheim gas field offers a considerable source of gas for industrial and commercial purposes. The reserves cannot be estimated on the basis of existing information, but the Germans expected to draw 570,000 cubic metres a day over a period of years for industrial purposes in the Ruhr.

3. In 1943-1944 a 70 km. pipeline was buitl from Bentheim to Hüls. The shipment of gas started in (about) May 1944. From September 1944 - March 1945 the line was supplying up to 300,000 cubic metres a day to the CHEMICHE WERKE at HULS.

The line is believed to be intact except at the crossing of the river LIPPE (40 metres) and the SEITENKANAL (30 metres) immediately NORTH of HULS: a detailed survey is still necessary to check the condition of the line. It is expected that the line could be put into operation within 14 days.

4. Condition of Fields

(a) Bentheim

The wells in the Bentheim Gas field are in good condition and can be brought into production in a few days, within, say, a week. The labour is available. Further drilling is not necessary in order to fill the gas line to capacity; the existing wells are sufficient. There is NO oil production at BENTHEIM.

(b) Dalum, Georgsdorf, Emlicheim fields.

The wells in these fields can be brought into production immediately, say in a few days. The three fields are dependent on electric power for their pumping units. Power is obtained from the Hesepe power station (12 Km. NORTH of LINGEN) which is in full working order. The production anticipated from these fields is as follows:-

	Tons per Day.
DALUM	80
GEORGSDORF	50
EMLICHEIM	50
Total	180

Crude oil production available for SALZBERGEN REFINERY may be placed at 5000 tons per month.

/ 5. Transport

5. Transport.

At present stagnation on the Hahnlite railways in the bottleneck to the shipment of crude from the fields to SALZBERGEN.

Given a production of 5000 tons a month from the fields, 30 to 40 tank cars of 10 to 15 ton capacity would be required. It is believed that some 15 serviceable cars are available in the area.

(a) Dalum Field

Hitherto, oil has been trucked by road to the railway at Lingen. Now, a pipeline runs from the field due EAST to the railway (7 kilometres) at GEESTE and is within a few days of completion.

The heavy nature of the crude makes heating stations along the pipeline essential; three in summer, five in winter. Heating stations are ready, but lack fuel, namely coal. The 1000 cubic metre tank on the railway has been holed, but may be partly serviceable; it may be further repairable. The question of shipping DALUM crude to the railway without road transport should be within a week of solution.

(b) Rosenforf Field

Crude oil must be trucked by road to the railway at VELDHAUSEN 8 km SW of the field. The trucks are reported to be available on the field, and in working condition. Fuel only, therefore, is required.

(c) Emlichem Field

A small gauge railway runs south from the field 4 km to EMLICHEIM on the railway. A diesel locomotive draws 5 cubic metre oil wagons from field to railway. Fuel only, therefore, is required.

B. BENTHEIM GAS FIELD

Production

Gas production started in small quantities in May 1944 (?). Before September the quantities shipped to Hulls were not large. Subsequent production has been:-

	CUBIC METRES	
	Bentheim No.10	Nordeutschland No.2.
1944 September	6,508,000	2,809,000
October	6,306,000	2,972,000
November	5,747,000	923,000
December	5,937,000	1,691,000
1945 January	7,097,000	2,418,000
February	5,720,200	3,256,000
March	Field closed in 25th March.	

Bentheim No.10. Closed in pressure 157 atmos.

Flowing pressure I 135 atmos.

Nordeutschland No.2.	Closed in pressure	137 atmos.
	# Flowing pressure	130 "
Bentheim No.13.	Closed in pressure	? "
	Well held in reserve: production equals that of No.10.	

At rates of production given (averages given only).

HÜLS PIPE LINE

Diameter	190 mm (say 8")
Wall thickness	7 mm
Type	Mannesman upset; packed and welded.
Weight	39/40 Kg. per metre.
Buried	1 metre 20 cm. depth.
Working pressures	25-40 atmos.
Max. pressure allowable	45 atmos.

C. DALUM OIL FIELD

A brief examination has been made into the production and shipping facilities of the Dalum (Lingen) Oilfield owned jointly by: Gewerkschaft Elwerath (Hanover) Grossdeutsche Schachtbau-und Tiefbohn A.G. (Salzgitter). which lies 1 km. W. of Dalum which lies 9 Km. N.W. of Lingen.

The condition of the oil field installations is good; the offices and storehouses have been internally disorganised, and contents largely wrecked; but their structures are still sound.

The following is a summary of the situation:-

Production

Number of producable wells	35
Number of wells drilled	38 or 41 (?)
Production, normal per day oil	80 tons
Production, normal per day gas	120 cubic metres.

Paraffin troubles common; treated by circulation of hot oil.
Pumping units at all wells: Thomassen units electrically driven; plunger pumps.
Oil very viscous and must be heated before shipment;
Crude oil heated on field by electricity (?)
To maintain a production of 80 tons for more than a few months, further drilling may be necessary.

Drilling

Rigs, complete, available	12
Wells' drilling	
Depth of wells	± 1000 metres

Casing scheme	16"	surface
	11¾"	200-300 metres
	8⅝"	800-900 "
	6½"	loose liner.

There is sufficient casing in the field for 4 wells according to the above scheme; a further 6 wells may be drilled by extemporized schemes.

/ Storage.

Storage: Field storage. In 10 small tank batteries situated in field. Field central storage 1500 tons.

Shipping Up to present time crude oil trucked to railway at Lingen (8 Km) and railed to Salzbergen from there.

Pipe line from field due east to railway at Lingen Station recently completed, together with 5 steam heating stations (3 erected, 2 running condition).

Pipe line, size [illegible] in diameter
Length of line 8 kilometres
Buried to depth of 1 metre 30 cms.
Not damaged.

Storage tank at Lingen station 1,000 tons.

present capacity owing to damage, 2,000 tons.
No field pumping station has been erected 2 days ago there; but oil dispatch has not begun. Pumps are driven by electric motors; supply available from Lingen Power Plant.
It is considered that during the summer, oil can be dispatched with the 3 heating stations, which are ready, only. But coal is required for the boilers; it is doubtful if peat will serve. In winter all 5 boilers would be required.

It is believed that the pipe line can be put into operation at any time, if coal is available and the 1,000 tons tank on the railway repaired.

Celle is a small place and it was stated that housing for labour presented a difficulty. There appeared, however, to be sufficient office space to house labour for a production and reduced drilling programme.

2. GERMANY: Refinery Production

Attached to these minutes is a summary of the output of gasoline and all finished products from all German refineries and dispersed plants for the period May 1944 to January 1945.

NOTES OF ENEMY OIL INTELLIGENCE

Far East

May 15th 1945.
I.O.45/19.

J1. JAPAN: Iso-Octane, T.E.L. Production, Etc.

The following items of interest are translated extracts from KEIZAI MAINICHI (Economic Daily) Osaka, 15.10.44..

2. In the catalytical cracking method such as the most progressive FUDORE (?) ( ) process of today, the inventor, FUDORE, derived his inspiration from the researches on the refining methods of artificial petroleum (Pencil note: Houdry?).

3. Although the history of artificial petroleum industry in our country is still quite young and its technique none the best, the expansion of the artificial petroleum industry is urgently required to meet the demands of the present moment.

Native Production of Iso-Octane and T.E.L.

4. a. The manufacture of iso-octane by the utilization of butenol (normal butyl alcohol) fermentation -- KATO Bensanburo of KYOWA Chemicals (recipient of the army medal for technical achievement of the third grade.)

b. Catalytic medium for the manufacture of iso-octane — ENTO Yoshijin of JAPAN Volatile Oil (recipient of the army medal for technical achievement of the third grade).

c. The perfection of the process for synthetic gasoline and iso-octane -- Assistant Professor FURUGAWA Shunjisuke of the Chemical Research Bureau of KYOTO Imperial University.

d. The success in the manufacture of aviation fuel possessing higher octane value than iso-octane by the use of iso-butane -- Assistant Professor HIBIYA Haruo of the Fuel Chemical Laboratory of KYOTO Imperial University.

e. The completion of the equipment for de-hydrogenation -- MITSUBISHI Petroleum.

f. Adding Agents (tetra-ethyl lead):
(1) Native production of tetra-octane lead -- OWADE Katsumi of JAPAN Sodas. (Recipient of the Navy medal for technical achievement).
(2) The manufacture of the aviation ethyl liquid -- Superintendent SHINOZAKI of HODOYA Chemical Industrial Corporation and HIRATA Shunji of JAPAN Sodas (Recipient of the army medal for technical achievement of the third grade).

g. But one must not be too optimistic over present condition.

5. Special Lubricating Oils:

a. But the fact is that because of the high amount of volatile matter and asphalt content, it is difficult to extract high grade lubricating oils from Japanese crude petroleum. From the crude petroleum now obtained in our country, high grade lubricating oil could be extracted, but because of its poor quality, large quantities could not be produced.

/ b.

b. The Development of a New Field -- Synthetic Lubricating Oil:

(1) Manufactured from paraffins. (paraffin wax).
(2) Manufactured from unsaturated, hydrogenated carbons.
(3) Manufactured from organic oils and fats.
(4) Manufactured through silent electric discharge.
(5) Manufactured through the utilisation of composite reactions.

c. Even in our country we are making synthetic petroleum by the FISCHER process; and by further synthesizing this product, high grade lubricating oil is formed.

d. Another method is the planting of castor oil plants. This product has high viscosity and leaves a strong oil film, with a solidifying point at 10 degrees below zero. The only defective point is its ready susceptibility to oxidation.

e. Recently active research is being conducted in the extraction of high grade lubricatingoil from organic oils and fats.

f. As a result of these investigations, a new light is thrown on the present resources of animal and vegetable oils and fats. A new hint may also be said to have been given as regards the manufacture of aviation lubricating oil in the future.

J2. JAPAN: Types of Fuel Supplied to Aircraft.

Summary of four bound mimeographed files with handwritten entries for months of August, September, October and November 1944, containing records of aviation fuel supplied to various units by 131 Airfield En. Captured [illegible] Area, PALAWAN - 7 Mar. 45.

List of Officer Air Personnel Receiving Aviation Fuel August - September 1944 Airplanes Using 91 Octane Aviation Fuel:

Type 1 Fighter
Type 1 Twin-engine Advanced Trainer
Type 99 Army Reconnaissance Plane
Type 97 Heavy Bomber
Type 100 Transport Plane
Type 3 Fighter
Heavy Fighter
Type 0 Reconnaissance Seaplane
Type 2 Advanced Trainer
Type 2 Carrier-based Attack Plane
Type 2 Two-seater Fighter
KI+ 43
Type 99 Assault Plane
Type 100 Reconnaissance Plane Model 2
Type 99 Twin-engine Light Bomber,
[illegible] 4 Fighter
SUISEI (+1) H6 Reconnaissance Plane
Carrier-based Attack Plane
Type 100 Heavy Bomber
Type 1 Fighter Model 3
Type 97 Carrier-based Attack Plane
Night Fighter
KI+ 51

Airplanes Using 92 Octane Aviation Fuel

Type 0 Observation Plane
MC++
Type 0 Fighter
Type 2 Two-seater Fighter
Type 99 Assault Plane
KI + 45
KI + 48
Type 96 Carrier-based Attack Plane
KI+ 51.
Type 97 Heavy Bomber
Type 100 H6 Reconnaissance Plane
Carrier-based Attack Plane
Type 1 Fighter.
Type 99 Twin-engine light Bomber
Medium Attack Plane
Type 96 Medium Attack Plane
KI+ 21

Airplanes Using 92 Octane Aviation Fuel

Type 99 Assault Plane

/ Airplanes

J4. JAPAN: Synthetic Oil Plants (P/W)

(a) 1. P/W had sometime visited the town of IKKIKAWA and stated that he had never heard of a synthetic oil plant there, and that the possible location indicated was, at the beginning of 1943 occupied by a milk canning factory.

2. P/W had recently been to IKKIKAWA and had heard that construction of a synthetic oil plant had been begun but later the project had been abandoned. He passed the site in Mar.43 and he saw the ground had been cleared and had uncompleted (but not fresh) buildings on it.

(b) 1. IKKIKAWA is the location of one of a group of synthetic oil plants planned for erection by KOIKARIO JINGO SEKIYO, the other locations being at KUROE and KUSHIRO. There is no definite evidence that the IKKIKAWA plant has been erected and one source reported that foundations had not been commenced in June 1939.

2. Reports about the plant at IKKIKAWA are scanty. Foundation work commenced in Oct. 1937 according to one source but there has been no further information as to construction work.

So far, air cover is not available to enable or check to be made on P/W's statements.

J5 JAPAN: Tokuyama Naval Fuel Station, Yamaguchi Ken:

P/W worked here for about 4 years ending August 1943, but knows very little concerning its layout. Since 1942 numerous buildings have been erected on the site of the former coal and briquette storage yards, and the briquette factory has been converted into a hydrogenation plant. P/W can not give the exact layout of these plants, but his description in general, agrees with that shown in inset of Map 1, Tokuyama Naval Station, OP-16-FE 31-44, August 1944. A newly-established can factory now exists on the reclaimed land east of the oil storage tanks. Buildings consisted of 1-story corrugated iron structures (concrete floors), running parallel with the Sanyo main line. P/W heard that since the summer of 1942, about one-third of the storage tanks have been empty because of insufficient oil production in contrast with demands. The total amount of fuel shipped from this station is unknown to P/W, but he stated that the maximum number of drums (50 gal. capacity) shipped per month was about 40,000 in 1943.

J6 JAPAN: Tokuyama Underground Fuel Installations

A project for installing underground fuel tanks in Tokuyama, Yamaguchi Ken, Japan in 1936 as a 5-year construction plan. P/W worked here for about 18 months, beginning when the project was started. During that period 5 tanks were completed, and several more were under construction. Since the project lasted until the latter part of 1941, he believes that the installation of at least 30 tanks was completed. Tanks Nos. 1 and 2 were located in a gully approximately 150-m NE of the Tokuyama-Kushigahama and Tokuyama-Kunaichi highway junction; tank No.3 was located about 200-m east of the Teishi Hachiman Shrine, and about 150-m N of tank No.1. The remaining tanks were installed in gullies situated within a 3/4 mile radius north of tank No.1.

A10" feed-line, running through an 8' x 6' concrete-finished tunnel, connected all tanks with the intake valve and pump located near the west bank of a 25 meter diameter cistern, approximately 50 meters SW of tank No.1. The cistern was constructed to catch the oil leakage from

/ tank

Airplanes Using 87 Octane Aviation Fuel

Type 97 Heavy Bomber
Type 97 Improved Transport Plane
Douglas
Type 100 KI+ 49 Model 2
Type 1 Twin-engine Advanced Trainer
Carrier-based Attack Plane
Type 100 Heavy Bomber
Type 1 Transport Plane
Type 99 Advanced Trainer.
Type 100 Transport Plane
Type 96 Medium Attack Plane
Type 99 Assault Plane
Type 96 Transport Plane.
AI++ Transport Plane
Type 0 Transport Plane
Type 2 Advanced Trainer
Type 97 Fighter

J3 JAPAN: Water Methanol

1. Water Methanol Injection of Emily Engine

Extracts from CINCPAC-CINCPOA Translation Item # 13,353, a reference manual for handling water injection equipment in Type 2 Flying Boat Model 12, EMILY, are given.

2. It is expected to increase generated HP by preventing detonation. At high manifold pressures the combustion of the ordinary vapor mixture is extremely violent, and an unusual explosion, that is to say detonation, occurs. However, it is believed that when water methanol injection is used, the water vapor retards the violent explosion within the cylinder and prevents detonation.

3. Water Methanol Mixtures

3-1 Components of Water Methanol (See Naval Air Hq Secret # 10046 of 15 July 1943).

Water, anti-knock methanol, and anti-freeze potassium chromate as the anti-corrosive compound are mixed as follows:

Water	50% (of volume)
Methanol	50% (of volume)
Potassium chromate	0.01% of water methanol (% of total weight).

Outline for preparing the Mixture.

First, 50% water and 50% methanol. (It is best to mix these amounts by dissolving the concentrated potassium chromate in a small amount of water at 15° to 50° C in portions of 20 grams to 200 liters of water methanol.

4. Precautions in Handling Water Methanol.

If too much concentrated potassium chromate is used in the mixture, lead chromate is formed and accumulates on the spark plugs causing unsatisfactory sparking. For this reason do not put in more than the specified amount of potassium chromate.

The water methanol mixture must be kept out of direct surlight as it evaporates just as gasoline does. Also, in respect to the water required, pure pipe /tap/ water should be used and water containing impurities or salt must not be used.

/. J4.

tank No. 1. (I.N.-P/W insists that this large cistern is for leakage from tank No. 1 only. He does not know about other tanks). The pump, electrically-operated, was in a chamber (12 feet x 12 feet, floor dimensions) constructed 15 feet underground. A corrugated iron shed, of approximately the same floor dimensions, was built on the ground directly over the location of the pump chamber.

To install tanks 12[illegible] feet in diameter and 13 feet in height, a spot (approximate 70-foot radius) in the center of the gully was excavated to a depth of 38 feet. First bottom mats of 3' thick reinforced concrete, and walls were constructed by placing concrete into 4' high, 2' wide wood forms reinforced with steel. After the forms were removed, the outer tank wall was surfaced with electric fly-welded 10 mm thick, steel plates. When this was completed, the excavated area adjacent and up to the molded tank wall was filled with concrete, resulting in a total wall thickness of 8 to 10'. This process was repeated until the specified tank height was attained. 8" x 12" steel beams were placed crosswise at 3' intervals on the tank top, laid with steel mesh, and then covered with 3' of concrete. This was then covered with 12 mm thick lead sheeting, over which was placed 4' of soil. Each tank was equipped with a 2' x 2' manhole and an iron step-ladder. P/W believes that there were 3 entrances to the pipe line tunnel; however, he has no knowledge concerning their locations. P/W estimates the highest point of this region to be about 90 meters above sea level. The terrain is densely covered with pine trees; however, practically all tank surfaces have been covered with bamboo growth. P.W. believes that clear aerial photography will probably reveal the majority of these installations.

J7 JAPAN: Indigenous Oil Production (Oil-east).

The necessity of completely revising the fundamental petroleum self-dependency policy has arisen as a result of difficulties involving the movement of oil tankers and other shipping. There is a great demand for extensive development of oil fields in Japan Proper along with greater production of synthetic petroleum and pine-root oil as means to assure sufficient quantity of aviation gasoline.

The demand and supply measures of our Nation's liquid fuel in recent years has been more or less dependent on the oil produced in the Southern Regions, and the development of oil wells in Japan Proper became very inactive.

In the last few years, production at home had gradually deteriorated as a result that existing machineries, drilling equipment, as well as accumulated materials and machineries and oil well experts and workers were sent abroad to the Southern Regions. However, a new oil deposit was discovered recently. It was found not very deep from the surface in the area administered by the Niigata branch office of the Kanto Munitions Superintendence Office.

The test drill was made at the number One Well of the Imperial Petroleum Company (Teikoku Sekiyu) which had prepared a test drill just prior to the outbreak of the Greater East Asia war. The test had to be abandoned because the company's facilities had to be transferred to the Southern Regions.

As a positive step toward the development of petroleum resources in Japan proper, a test drill of the Number Two Well began in January of this year followed by successive tests. At the Number Two Well, the well gushed forth on Apr. 3, disclosing one of two veins at a depth of little more than 600 meters. It is already producing hundreds of thousands of tons daily.

/ The

The crude oil produced here contains a very high octane number, at a rate quite unusual in Japan Proper. High-grade aviation gasoline as well as lubricant oil, a by-product with low-freezing quality, are refined from oil produced from these wells. The test-drill of the Number Five Well which is now being buried is expected to produce somewhat less than the Number Two. But the Number Four Well is expected to produce in larger quantity than the Number Two. It is hoped that some results will be shown by the latter part of this month. Production of several thousand tons of crude oil daily is promised. (Miyo, DOMEI, in Domei to O.W.I., Apr. 18, 1945, 9:00 a.m. EW).

(b) The erection of tankage required to handle such prolific production may possibly be among the Japanese in obtaining the full benefit of such a valuable windfall at this crucial moment.

J8. EAST INDIES: Oil Shipments (E/E)

E/W declared in Indonesian broadcasting to his recollection that Aviation Gasoline for the PHILIPPINES came from Japan itself (end 1944) and that since July-Aug. 44 no oil from EAST INDIES was shipped to JAPAN in view of the shortage of shipping space.

Anl.4 b 45/18

Anlage 1

Der Beauftragte für den Vierjahresplan
Der Beauftragte
für die Förderung der Erdölgewinnung

GEHEIME REICHSACHE!

Erdölförderplan 1945

(b. Soll.)

I. Großdeutsches Reich:

1) Hannover:	522.900	
2) Schleswig-Holstein	120.000	
3) Emsland-Osthrikenland:	98.000	
4) Braunschweig:	52.000	
NW-Deutschld.(s.Anl.2):		792.900
5) Baden	8.000	
6) Elsaß:	60.000	
Rheintal:		68.000
7) Niederdonau (s.Anl.4):		1.107.900
8) Protektorat (s.Anl.5):		36.000
9) Generalgouvernement (Forlico):		36.000
Summe Großdeutsches Reich:		2.040.800

II. Sonstige Länder:

1) Ungarn	800.000
2) Kroatien	30.000
3) Slowakei	24.000
4) Niederlande	6.000
Summe:	860.000

Berlin, den 20. November 1944.
Fu/Gehe. J.Nr.: LB-D 1000/44.

Der Beauftragte für den Vierjahresplan
Der Beauftragte
für die Förderung der Erdolgewinnung

Forderplan Grossdeutschland 1945
(in Tonnen)

	Jan.	Febr.	März	April	Mai	Juni	Juli	August	Sept.
1) Nienhagen	15.070	14.580	14.970	13.730	13.650	13.530	12.290	12.180	12.060
2) Heide	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000
3) Wesendorf	6.400	7.050	7.600	8.250	8.900	9.600	10.300	10.950	11.600
4) Fuhrberg	4.800	4.800	4.800	4.700	4.700	4.700	4.600	4.600	4.600
5) Rodewald	4.000	3.700	3.700	4.100	4.500	4.500	5.000	5.000	4.500
6) Linden	3.[illegible]0	3.200	3.500	3.700	4.100	4.400	4.400	4.600	4.600
7) Hohenassel	4.200	4.000	4.200	4.000	4.200	4.200	4.100	4.200	4.200
8) Wietze	2.650	2.430	2.670	2.600	2.670	2.550	2.650	2.650	2.500
9) Thören	2.180	2.240	2.340	2.220	2.290	2.280	2.370	2.330	2.400
10) Emlichheim	1.500	1.500	1.500	2.000	2.000	2.000	2.500	2.500	2.500
11) Reitbrook	2.485	2.350	2.350	2.310	2.250	2.190	2.150	2.100	2.050
12) Georgsdorf	1.200	1.000	1.200	1.200	1.200	1.200	1.200	1.200	1.200
13) Mölme	1.300	1.100	1.200	1.200	1.200	1.100	1.100	1.100	1.100
14) Eicklingen	1.400	1.000	1.200	1.000	1.000	1.000	800	800	800
15) Hademstorf	650	600	600	1.000	900	850	1.000	900	850
16) Oberg	770	730	730	710	680	670	670	660	640
17) Etzel	500	500	500	500	500	500	500	500	500
18) Hanbühren	500	400	500	400	400	400	400	400	400
19) Gifhorn	260	250	260	260	260	260	260	260	260
20) Meckelfeld	300	300	300	260	260	260	240	240	240
21) Eddesse	300	250	250	200	200	200	200	200	150
22) Broistedt	180	160	180	180	180	160	160	160	160
23) Ehra	30	30	35	35	35	30	30	30	25
24) Sottorf	10	5	10	5	10	10	10	10	10
Summe NW-Deutschld.	63.685	62.175	64.595	64.560	66.085	66.590	66.930	67.570	67.345
1) Pechelbronn	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000
2) Forst-Weiher	500	400	450	450	450	450	450	450	450
3) Weingarten	250	200	250	200	250	200	250	200	200
Summe Rheintal:	5.750	5.600	5.700	5.650	5.700	5.650	5.700	5.650	5.650
Niederdonau:	98.600	91.400	97.450	95.550	95.950	95.850	95.200	90.800	87.650
Summe:	168.035	159.175	167.745	165.760	167.735	168.090	167.830	164.020	160.645

Berlin, den 20. November 1944.
Btz/Schr. J.Nr.: DB-D 1000/44.

Forderplan Grossdeutschland 1945
(in Tonnen)

April	Mai	Juni	Juli	August	Sept.	Okt.	Nov.	Dez.	Summe:	
13.730	13.650	13.530	12.290	12.180	12.060	11.210	11.090	10.990	155.350	1)
10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	120.000	2)
8.250	8.900	9.600	10.300	10.950	11.600	12.450	13.150	13.750	120.000	3)
4.700	4.700	4.700	4.600	4.600	4.600	4.500	4.500	4.500	55.800	4)
4.100	4.500	4.500	5.000	5.000	4.500	4.000	3.500	3.500	50.000	5)
3.700	4.100	4.400	4.400	4.600	4.600	4.700	4.800	5.000	50.000	6)
4.000	4.200	4.200	4.100	4.200	4.200	4.400	4.300	4.000	50.000	7)
2.600	2.670	2.550	2.650	2.650	2.500	2.600	2.550	2.480	31.000	8)
2.220	2.290	2.280	2.370	2.330	2.400	2.360	2.380	2.450	27.840	9)
2.000	2.000	2.000	2.500	2.500	2.500	3.000	3.000	3.000	27.000	10)
2.310	2.250	2.190	2.150	2.100	2.050	2.020	1.985	1.960	26.200	11)
1.200	1.200	1.200	1.200	1.200	1.200	1.500	1.400	1.500	15.000	12)
1.200	1.200	1.100	1.100	1.100	1.100	1.100	1.100	1.100	13.700	13)
1.000	1.000	1.000	800	800	800	600	600	600	10.800	14)
1.000	900	850	1.000	900	850	800	1.000	900	10.050	15)
710	680	670	670	660	640	620	620	600	8.100	16)
500	500	500	500	500	500	500	500	500	6.000	17)
400	400	400	400	400	400	400	400	400	5.000	18)
260	260	260	260	260	260	260	260	250	3.100	19)
260	260	260	240	240	240	200	200	200	3.000	20)
200	200	200	200	200	150	200	150	200	2.500	21)
180	180	160	160	160	160	160	160	160	2.000	22)
35	35	30	30	30	25	30	25	25	360	23)
5	10	10	10	10	10	10	5	5	100	24)
64.560	66.085	66.590	66.930	67.570	67.345	67.620	67.675	68.070	792.900	
5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	60.000	
450	450	450	450	450	450	450	450	450	5.400	
200	250	200	250	200	200	200	200	200	2.600	
5.650	5.700	5.650	5.700	5.650	5.650	5.650	5.650	5.650	68.000	
95.550	95.950	95.850	95.200	90.800	87.650	86.850	86.700	85.900	1.107.900	
165.760	167.735	168.090	167.830	164.020	160.645	160.120	160.025	159.620	1.968.800	

Der Beauftragte für den Vierjahresplan
Der Beauftragte
für die Förderung der Erdölgewinnung

GEHEIME REICHSACHE

Anlage 3.

Förderplan Nienhagen 1945.

(in Tonnen)

	Jan.	Febr.	März	April	Mai	Juni	Juli	Aug.	Sept.	Okt.	Nov.	Dez.	Summe:
Elwerath[1]	9.000	9.000	9.000	8.500	8.500	8.500	7.500	7.500	7.500	7.000	7.000	7.000	96.000
Vacuum[2]	3.300	2.800	3.100	2.900	2.800	2.700	2.700	2.600	2.500	2.400	2.300	2.200	32.200
Wiag[3]	2.000	2.000	2.000	1.500	1.500	1.500	1.250	1.250	1.250	1.000	1.000	1.000	17.250
Deu[4]	[illegible]	530	620	5[illegible]0	[illegible]00	560	590	560	560	560	540	540	6.900
Itag[5]	[illegible]	250	250	250	250	250	250	250	250	250	250	250	3.000
Summe:	15.070	14.[illegible]	14.970	13.730	13.[illegible]	13.550	12.290	12.180	12.0[illegible]0	11.210	11.090	10.990	155.350

1) einschl. [illegible]-Schwülingen
2) " [illegible] Parzellen in Nienhagen
3) " Kohlen-[illegible]
4) " [illegible]-Obershagen
5) " Schwülingen

Berlin, den 2[illegible]. November 194[illegible].
[illegible] Tgb.-Nr. [illegible]-D 1000/44.

Der Beauftragte für den Vierjahresplan
Der Beauftragte
für die Führerauslese der Luftwaffe

Anlage 4

GEHEIME REICHSSACHE!

Förderplan Niederdonau 1944.

(in Tonnen)

	Jan.	Febr.	März	April	Mai	Juni	Juli	Aug.	Sept.	Okt.	Nov.	Dez.	Summe:
1. Dux-St. Ulrich	39.000	36.000	39.000	37.000	36.000	36.000	35.000	31.000	29.000	29.000	27.000	26.000	400.000
2. Rax-Gaisberg-Zinnersdorf	21.000	20.000	21.000	21.000	21.500	21.500	21.500	21.500	21.500	21.500	21.000	21.000	254.000
3. Haag-Neunkirchen	9.000	9.000	10.000	10.000	10.000	10.000	10.000	10.000	9.000	8.000	10.000	10.000	115.000
4. Hühlberg	8.000	7.500	7.500	8.000	8.500	9.000	9.000	9.500	9.500	10.000	11.000	11.000	108.500
5. KPC-Pitten-dorf	8.000	7.000	8.000	8.000	7.500	7.000	7.500	7.000	6.500	6.500	6.000	6.000	85.500
6. Wien Siedlung-Neustift	6.500	5.500	5.800	5.700	5.800	5.500	5.600	5.200	5.200	5.000	4.700	4.600	65.000
7. Niederdonau-Neukirchen	3.600	3.400	3.300	3.100	3.000	3.100	3.000	2.800	2.800	2.600	2.500	2.500	35.700
8. Niederdonau-Industrie -	2.450	2.450	2.300	2.350	2.850	2.900	2.700	2.700	2.800	2.650	2.900	2.900	32.000
9. Niederdonau-Hohenruppers-dorf	350	300	350	350	450	500	550	550	650	900	950	1.250	7.200
10. Niederdonau-Semmelbach	250	200	150	150	350	350	350	550	700	700	650	650	5.000
Summe:	98.600	91.400	97.450	95.550	96.950	96.850	95.200	90.800	87.650	86.850	86.700	85.900	1.107.900

Berlin, den 20. November 1944.
Bkz/Schr. J.Nr.: IP-D 1000/44.

Der Beauftragte für den Vierjahresplan
Der Beauftragte
für die Förderung der Erdölgewinnung

Anlage 5.

GEHEIME REICHSACHE!

Förderplan Protektorat Böhmen und Mähren 1945.

(in Tonnen)

	Göding	Sokolnic	Luschitz	Kostel	Summe:
Januar	400	1.000	150	320	1.870
Februar	450	1.000	150	300	1.900
März	450	1.000	300	400	2.150
April	500	1.000	300	380	2.180
Mai	500	1.000	500	500	2.500
Juni	600	1.000	500	550	2.650
Juli	700	1.000	800	550	3.050
August	700	1.000	1.000	600	3.300
September	800	1.000	1.000	800	3.600
Oktober	1.300	1.000	1.000	800	4.100
November	1.300	1.000	1.000	800	4.100
Dezember	1.300	1.000	1.300	1.000	4.600
Summe:	9.000	12.000	8.000	7.000	36.000

Berlin, den 2[illegible]. November 1944.
Btr/Schr. J.Nr.: 1000/44-D