

WEEKLY SURVEY OF AXIS EUROPEOIL PRODUCTIONNo. 28 - 21st December, 1944.

NOTE: This survey summarizes the conclusions of the Working Committee (Oil Production) of the Combined Strategic Targets Committee upon the current status of Axis oil production. The assessments are based on ground intelligence and deductions from air cover; the forecast of future output takes into account the enemy's potential morale performance, but makes no allowance for additional damage in further attacks. The present report includes the known results of all attacks up to and including December 17th.

I. ATTACKS.

The following attacks were made since our last report.

<u>Date</u>	<u>Location</u>	<u>Company</u>
11.12	HOOBENHEIM	Borsig Chemie
	OSTERFELD	Gutscheifaugohütte (Benzol)
	BRUCKHAUSEN	Gelsenkirchener Bergwerks (Benzol)
	HEIDENICH	" " "
12.12	HEIDENICH	" " "
	LEUNA	I.G. Farben
16.12	LUDWIGSHAFEN/OPPAU	I.G. Farben
	BRUCKHAUSEN	Gelsenkirchener Bergwerks (Benzol)
	ELBE	Sudetendeutsche Erbstoffwerke A.G.
	LEUNA	Hermann Goering (Benzol)
17.12	BRECHENHAGEN NORTH	I.G. Farben
	BRECHENHAGEN SOUTH	I.G. Farben
	ODERFELD	Schellwieser Leuna

II. EFFECTS ON PRODUCTION.

Some reconnaissance data was secured during the past week on a few targets in Germany. Air cover obtained of targets in Austria and Czech-Slovakia has enabled the position in those two countries to be assessed more firmly. In estimating output no information is yet available of the effects of the recent attacks on BRUX, the two BRECHENHAGEN and BRESCHOWITZ; the effectiveness of the latest attack on LEUNA is also not known.

Cover received during the week of the results of previous attacks has resulted in the writing down of the estimates of current production at ELBITZ, BOHLEN, HILBERG and one Austrian refinery. Should the latest attacks have achieved average success in putting the Silesian plants, BRUX and LEUNA out of action, total output in December is unlikely to exceed the total output in November and if further successful attacks are carried out during the second half of the month the reversal of the previous upward trend in production would be very probable.

The revised estimates of total production in Table I (also summarized below) do not make any allowance for the effects of the

/most

most recent attacks or for the possible effects of future attacks. An estimate has been made of the maximum output in January 1945 in the event that recovery is not impeded by further attacks.

metric tons per month

Pre-raid normal output of finished products	1,344,000 tons (100%)
Estimated output in 1944	
September	311,000 (23%)
October	306,000 (29%)
November	452,000 (32%)
December (maximum)	482,000 (36%)
1945 January (maximum)	571,000 (45%)

Revised estimates of the output of the principal refined products in November and December are given below:-

	<u>% of pre-raid normal output</u> <u>November</u>	<u>December</u>
Gasoline	32%	39%
Kerosene	17%	14%
Gas/Diesel Oil	37%	45%
Wool Oils	10%	37%
Auto Oils	21%	21%
Total	52%	36%

III. CONDITION OF THE PRODUCING PLANT.

(a) Synthetic Plants.

There has been no further cover of the elven synthetic plants in Western Germany but there is no reason to believe that any of them may yet have resumed production, although at least four are potential producers in the second half of December.

In Central and Eastern Germany, the situation has developed as follows:-

LEUNA was attacked again on December 12, making the seventh attack since the last full cover of the plant was obtained on November 14. The majority of the attacks have not, however, been very promising and the plant was still seen to be active on strike photographs of November 30, since which time four further attacks have taken place.

BMX is thought to have attained a high level of production at the time of the heavy attack by the U.S. 15th A.F. on December 16. The results of this attack are not yet known.

BLECHHAMMER SOUTH may have resumed operations following the damage inflicted in the attack of December 2, when it was attacked again on December 17 and 18. The results of these latest attacks are not yet known but there must obviously be a good prospect that the plant has been put out of action for a further period.

/BLECHHAMMER NORTH

BLUMENHOFER NORTH was also probably stopped by the attack of December 2 and may have been about to resume when attacked again on December 17 and 18. In this case also there is a good chance that the interruption of output has been further prolonged.

POLITZ is by now probably operating at 75% of capacity and is likely to be the major current source of supply of aviation gasoline for the G.A.F.

ZITZ, covered during the course of the week, was seen to be not working at more than 50% of capacity, which is less than had been expected. This limited operation does not appear to have been due to fresh damage suffered in the attack of November 30 which was of a minor character. It is more likely that the performance of this plant has been permanently affected by the severity of the damage suffered in the past.

BOHLEN, also covered in the course of the week, was seen to be working at about 75% of capacity and to have received negligible fresh damage in the attack of November 30. This is the least severely damaged of the major Bergius plants and it may be capable of 100% operation by January.

LUTZKENDORF and MAGDEBURG may by now be working at 75% of capacity, though there is no cover whereby this can be confirmed. Neither plant is likely to improve on this performance for some time to come.

The position in regard to the Fischer Tropsch plants in Central and Eastern Germany is as follows:-

FRIEDLAND is confirmed by small cover to be active. It is unlikely to be working at less than 75% of capacity.

DESCHOWITZ (ODERTAL) is likely to have been almost in full production when attacked on December 17 and 18. The results of these attacks are not yet known.

LUTZKENDORF is probably now working at 50% though this has not recently been checked by fresh cover.

(b) Germany: Refineries.

Fresh cover of MISBURG, shows that the plant is still inactive following the attack on November 29. This probably means that the damage to vital equipment was fairly severe and in these circumstances it is unlikely that operations can be resumed before the New Year.

Of the other crude refineries, only HEIDE-HAMMINGSDIEDT is positively known to be active but the possibility must be reckoned with that Rhenania-HARBURG is now back in operation. If damage in the attacks of mid-November was not severe (there is no post-raid cover) a sufficient interval has elapsed to allow repairs to be completed.

Partial cover of ROSITZ shows some activity; as repairs were seen to be in hand in October it is not surprising that this plant should by now have returned to partial production.

On the other hand cover of the smaller Emmerich Luboil plant, near DUISBURG, obtained on the same day, showed that no attempt had been made to repair the damage inflicted in August and that the plant is derelict. Its abandonment is more easy to understand in the light of information from the managers of a similar plant in Belgium to the effect that the operation of this process has been impaired by difficulties in obtaining the necessary vegetable oil feedstocks.

The finishing plants now known to be active are therefore as follows:-

MONHEIM
ROSITZ
REICHOLD
GIESSENBERGEN
DOLLBERGER

The status of BPAG and Rhenania: HAMBURG-WILHELMSSBURG is in doubt until cover is obtained of the results of the attack of November 21.

(c) Austria: Refineries.

The status of the Austrian refining industry has now been clarified by fresh cover.

FLORIDSBURG, MAGERAT, MORGENBERG, and VOSENDORF are all seen to be in a high state of activity and have not suffered significantly from recent attacks. In view of the activity of these plants Austrian production in December has recovered to about one-third of its original level.

SCHNECHAT, however, is seen to have received further damage in the attack of November 19 and was inactive in the first week of December. As some distillation equipment remains intact, resumption later in the month is possible.

LOMAN, although not covered since November 27 is not yet likely to resume operations but may be operational again in January.

MOOSBIERBAUM was attacked on December 11 with results which are as yet unknown.

(d) Czechoslovakia: Refineries.

The activity of the KILIN refinery has now been confirmed.

Cover of the same day shows, as was expected, that the important PARDUBICE refinery is again in operation and that repairs are continuing.

With/

With KRALUPY and MORAVSKA OSTRAVA also probably active, and with DUBOVA as a possible producer, the throughput of the Czech refinery industry in December is likely to have recovered to about 45% of the pre-attack level.

The HUNGARIAN and CZECH POLISH plants, however, remain inactive.

(c) Hungarian Refineries.

The KILMEZ and AKOSI refineries may still be in limited operation but are now threatened directly by the latest developments of the Russian offensive north of the Danube.

No further progress has been made in the Russian advance in the oilfields S.W. of Lake Balaton and it must be assumed that crude oil is still being shipped away by tank-car via Vienna. No shipments can now take place by pipe-line and with the partial encirclement of BUDAPEST it seems probable that the Hungarian refinery industry has been effectively neutralized apart from the two plants mentioned above.

(f) Polish Refineries.

In the absence of evidence to the contrary, it is thought probable that the KRAKOW and GDAŃSK (DZIEKOW) refineries are in partial operation.

(g) Danish Plants.

Further attacks were made during the week against the BRUCHWALDE, BLINDENIC, OSTHOLZ and LANGE oilfield plants. The status of these plants together with WILHELMROSE and EISENHOFEN is unknown. WILHELMROSE is at the rear of the German front.

Of the plants damaged in earlier weeks, LANGE, BLINDENIC, KATZMERSTUHL and SCHULZ are now all mostly active.

Of the remaining plants seven are active and five inactive.

ACCIDENT AND LOSS BRANCH
(A.C. & L.B.)

22nd December 1944.

TABLE I.

SECRET

ESTIMATED CURRENT CRUDE OIL FLUENTS FROM
INDONESIA, 1950-1951 TO 1952-1953
(All figures in thousands of barrels per day)

SYNTHETIC PLANTS	Estimated output of Synthetic Plants				
	1950-51	1951-52	1952-53	1953-54	1954-55
1. Pertamina	150	150	150	150	150
2. Pertamina	150	150	150	150	150
Total Synthetic Plants	150	150	150	150	150
Percentage of Total Crude	15%	15%	15%	15%	15%

REFINING PLANTS

REFINING PLANTS	Estimated output of Refining Plants				
	1950-51	1951-52	1952-53	1953-54	1954-55
1. Pertamina	150	150	150	150	150
2. Pertamina	150	150	150	150	150
3. Pertamina	150	150	150	150	150
4. Pertamina	150	150	150	150	150
5. Pertamina	150	150	150	150	150
6. Pertamina	150	150	150	150	150
7. Pertamina	150	150	150	150	150
8. Pertamina	150	150	150	150	150
9. Pertamina	150	150	150	150	150
10. Pertamina	150	150	150	150	150
11. Pertamina	150	150	150	150	150
12. Pertamina	150	150	150	150	150
13. Pertamina	150	150	150	150	150
14. Pertamina	150	150	150	150	150
15. Pertamina	150	150	150	150	150
Total Refining Plants	150	150	150	150	150
Percentage of Total Crude	15%	15%	15%	15%	15%

GRADE CRUDE

GRADE CRUDE	Estimated output of Grade Crude				
	1950-51	1951-52	1952-53	1953-54	1954-55
(i) Grade Crude	150	150	150	150	150
(ii) Grade Crude	150	150	150	150	150
(iii) Grade Crude	150	150	150	150	150
Total Grade Crude	150	150	150	150	150
Percentage of Total Crude	15%	15%	15%	15%	15%

NOTE: (A) Amount of crude oil available to extent of available capacity.
(B) Crude oil refining output of 1950-1951 from Pertamina.
(C) Figures for 1952-1953 and 1953-1954 are based on available data and are subject to change. Total figure is based on available data.
(D) From sources comprising bencol, kerosene, gas oils, etc., and including refined oils used as light oils.

TABLE VI

ESTIMATED OUTPUT OF PRINCIPAL FINISHED OIL PRODUCTS

(All figures in thousands of metric tons)

	<u>GASOLINE</u>	<u>KEROSENE</u>	<u>AVIATION OILS</u>	<u>FUEL OILS</u>	<u>LUBRICANTS^{XX}</u>	<u>TOTAL</u>
<u>Normal Year-1944</u>						
<u>Monthly Output</u>	932	100	281	290	145	1548
<u>Estimated Output in November:</u>						
From: Foreign Plants	96	-	42	-	4	142
Elmendorf Refinery	19	2	5	1	1	28
Refining of Imported Oils	18	35	57	18	24	102
Other Sources	38	-	25	84	12	160
Total Resources	171	37	109	103	31	452
Percentage of Pre-war Total	32%	27%	39%	35%	21%	32%
<u>Estimated Output in December:</u>						
From: Foreign Plants	127	-	56	-	5	188
Elmendorf Refinery	34	2	13	2	2	53
Refining of Imported Oils	17	22	57	16	12	95
Other Sources	20	-	23	87	12	150
Total Resources	208	24	129	105	31	487
Percentage of Pre-war Total	39%	18%	45%	37%	21%	35%

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NOTE: The figures above for lubricating oil output are largely theoretical.

SECRET TABLE III: CURRENT PRODUCTION STATUS OF PRINCIPAL OIL PLANTS. 1944 DECEMBER, 1944.
 (Production figures are in thousands of metric tons)

PRODUCTION STATUS	24 REFINED PLANTS	22 CRACKING REFINERIES	23 OTHER REFINERIES	23 REFINED PLANTS
Category 1 IN FULL PRODUCTION				DWAID-FORTSCHWING (0.6) ROBERT FUSER (0.6) STADLER (0.5) HINSEYER SEIN (0.5) SHERGUTER (0.8) FORTSCHWING (0.6) CASTROP RAUHE T.A.R. (1.0) MORAVSKA OSTRAVA T.A.R. (0.6)
Category 2 IN PARTIAL PRODUCTION (Combined L. & H. capacity)	KOLIN (12.7) ST. (12.7) (0.5)	(0.8) (11) (11) (11) (11) (11) (11)	VIENNA-RIEDLSCHN (0.3) VIENNA-LIEN (0.2) BOHEMIA (0.1) VIENNA-SELEDOFF (0.1) VIENNA (0.5) KOLIN (0.5)	VIENNA PLUTO (0.5)
Category 3 IN PARTIAL PRODUCTION (Combined L. & H. capacity)	GUTTENBERG (10.0) BOHEMIA (10.0)	(10.0) (11) (11)	BOHEMIA (0.5) VIENNA (0.1) VIENNA-SELEDOFF (1.2) VIENNA (4.5) ST. (2.5) VIENNA (1.6) VIENNA-SELEDOFF (1.2) (1.6)	VIENNA (0.8) VIENNA-SELEDOFF (0.7)
Category 4 IN PARTIAL PRODUCTION (Combined L. & H. capacity)	BOHEMIA (10.0) BOHEMIA (10.0) BOHEMIA (10.0) BOHEMIA (10.0) BOHEMIA (10.0)	(10.0) (11) (11) (11)	VIENNA-SELEDOFF (0.5) VIENNA-SELEDOFF (0.3)	VIENNA-SELEDOFF (1.0) VIENNA-SELEDOFF (1.0) VIENNA (0.6) VIENNA-SELEDOFF (0.5) VIENNA-SELEDOFF (0.5)

/ Category 5.

PRODUCTION STATUS	25. 3. 1944 (1944)	22. 3. 1944 (1944)	23. 3. 1944 (1944)	23. 3. 1944 (1944)
Category 5 PRODUCTION SUSPENDED (no vital installations)	CASTROP RAUZE (4.5) ICHEN (5.0) DORTMUND (4.0)	EMBURG (Herc) (2.0)		
Category 6 PRODUCTION SUSPENDED (no vital installations; no fuel)	WESSELING (8.5) BOCHUM-UNION (7.2) BOCHUM-UNION (7.2) BOCHUM (11.0)	EMBURG (Herc) (13.0) BOCHUM (4.0) BOCHUM-UNION (11.0) BOCHUM (11.0) BOCHUM-UNION (11.0) BOCHUM (11.0) BOCHUM (11.0) BOCHUM (11.0) BOCHUM (11.0)	BOCHUM (4.0) BOCHUM (1.0) BOCHUM-UNION (5.0) BOCHUM (1.0) BOCHUM (1.0) BOCHUM (1.0) BOCHUM (1.0) BOCHUM (1.0)	
Category 7 PRODUCTION STATUS UNION (Post-aid cover added)	BOCHUM (24.0) BOCHUM (24.0) BOCHUM (4.0)	BOCHUM-UNION (11.0) BOCHUM (11.0)	BOCHUM (1.0)	BOCHUM (1.0) BOCHUM (1.0) BOCHUM (0.9) BOCHUM (0.9) BOCHUM (0.8) BOCHUM (0.6) BOCHUM (0.6)

* Production of synthetic oil.