

APPENDIX A

LIST OF CAPTURED DOCUMENTS AND
SAMPLES

The attached list differs from the original which was prepared in the field and returned with the documents, in the following respects:

1. The titles have been amplified to give a more accurate description of the contents of each document.
2. The documents have been further classified according to subjects as indicated on the following page, and the documents pertaining to each subject have been tied in bundles for convenient future reference. The letter following each document number indicates the subject classification.
3. Many documents have been recorded on microfilm with the cooperation of USSBS. Following the title of documents which have been microfilmed the letter "C" indicates a document completely microfilmed and "P" indicates partly microfilmed.
4. On the subject classification list on the following page the "Sack Number" indicates the MIRS sack in which the subject bundle in question has been placed for storage.

RESTRICTED

SUBJECT CLASSIFICATION OF DOCUMENTS

		Sack No.
A.	Plant Production and Cost Records, Shipping and Receiving Records	1477
B.	Synthesis Gas Production and Purification	1477
C.	Synthesis Operation including Catalyst Data	1477
D.	Primary Product Recovery and Refining	1478
E.	Research, Development, and By Products	1478
F.	Personnel and Organization	1478
G.	Methods of Test and Analysis except Engine Testing	1478
H.	Engine Testing of Fuels	1478
I.	Bomb Damage	1478

RESTRICTED

APPENDIX A

LIST OF CAPTURED DOCUMENTS

<u>Doc. No.</u>	<u>Class</u>	<u>Title</u>	<u>Micro films</u>
1.	A	Correspondence and accounts in connection with royalty payments to Ruhrchemie late 1940 through 1944. (Book and loose sheets).	C
2.	A	Ruhrchemie license with correspondence and accounts regarding royalty payments 1935 to July 1940	C
3.	A	Record of daily receipts of chemicals, desulfurizing catalysts, oil stocks etc., including weights and origin of shipments Jan. 1942 thru Oct. 1943.	C
4.	A	Daily production figures, primary products only 1943.	P
5.	A	Record of daily receipts of chemicals, desulfurizing catalysts, oil stocks etc., including weights and origin of shipments Nov. 1943 thru 1944.	
6.	A	Daily production figures, primary products only 1944.	P
7.	C	Synthesis catalyst shipments from Ruhrchemie July 1940 to October 1944.	C
8.	C	Raw material requirements for synthesis catalyst preparation from 1936 to date.	C
9.	A	Record of taxable benzin production 1943-1944.	
10.	A	Record of taxable benzal production 1943-1944.	
11.	B	Misc. data on gas cracking operation	
12.	E	Construction schedules for improvements and expansion of Moers plant 1942-1943.	C
13.	E	Alcohol production figures in connection with royalty payments to Merck.	
14.	A	Monthly summaries of production, shipments and stocks, including by products, 1944.	P

<u>Doc. No.</u>	<u>Class</u>	<u>Title</u>	<u>Micro films</u>
15.	A	Shipping records showing car numbers, weights consignees for all products in 1944.	
16.	A	Daily reports on production, shipment, and stocks including alcohols etc. Jan-July 1944 summarized by months.	C
17.	A	Monthly cost statements including summaries of production 1943 and 1944. Summary of costs for 1942.	P
18.	C	Calculations of conversions per stage and overall for synthesis ovens, 1941 and 1942.	
19.	C	Material and energy balance for gas production and synthesis units including graphs of daily production 1941-1942.	P
20.	A	Cost and production summary for July 1944, (Now combined with 17)	P
21.	B	Miscellaneous papers on gas composition.	
22.	F	Miscellaneous documents relating to Moers personnel and organization.	
23.	A	Daily report sheets for production, shipments and stocks, most of 1944.	P
24.	B	Drawing of complete plant for synthesis gas production at Moers (1938)	
25.	B	Koppers drawings and description of proposed enlargement of Moers water gas plant (1938)	P
26.	D	Complete set of drawings with engineering calculations for all parts of Wilke oil cracking unit and clay treating unit (1939)	P
27.	C	Drawing of special rail car carrying two Kubels for synthesis catalyst.	
28.	D	Diagrams and description of Moers charcoal absorption plant (1939)	
29.	B	Description and drawings of Rheinpreussen Grobreinigung unit built by Aug. Klönne.	
30.	B	Detail drawing of masonry in Zundkammer of gas generators. (1942)	

RESTRICTED

<u>Doc.</u> <u>No.</u>	<u>Class</u>	<u>Title</u>	<u>Micro</u> <u>films</u>
31.	D	Diagram of Stabilization unit #1	
32.	B	Drawing of combustion shaft of the cowper stove for gas cracking.	
33.	B	Drawing of slag washing plant.	
34.	B	Detail drawing of masonry on gas generator (1936).	
35.	B	Detail drawing of masonry in "Zundkammer" of gas generator (1941).	
36.	B	Detail drawing of masonry on gas generator (1941).	
37.	B	Detail drawing of masonry on "Zundkammer" of Gas generator	
38.	B	Drawing of fine Purification Plant.	
39.	B	Drawing of fine Purification Plant.	
40.	B	Drawing of fine Purification Plant.	
41.	B	Detail drawing of masonry on dust separator and connecting conduits of gas generator (1941)	
42.	A	Tabulations of equipment and capacities of all "Western" Fischer Tropsch plants Oct. 1939.	P
43.	H	Notes re apparatus for controlling feed of liquefied gas to engine and determining anti-knock value.	
44.	H	Data on relation between cetane and cetene numbers.	
45.	C	Graphs of unidentified variables in operation of second stage of F.T. including C ₂ + C ₃ content of gas 1943-1944 (Cf Doc 90).	
46.	G	Procedure for taking gas samples from ovens and for low temperature fractional distillation of these samples to determine composition (1944).	
47.	C	Blank form for reporting operating conditions and production data all Fischer-Tropsch plants.	
48.	C	Data pertaining to determining condensible hydrocarbons in gas.	

RESTRICTED

RESTRICTED

<u>Doc. No.</u>	<u>Class</u>	<u>Title</u>	<u>Micro films</u>
49.	E	Apparently unpublished thesis by W. Beir on a study of the solidification characteristics of mixed waxes.	
50.	E	Miscellaneous and relatively unimportant test data for synthesis, charcoal absorption, cracking and alcohol units.	
51.	A	Detailed calculations of costs of making diesel fuel and alcohols, and reworking synthesis catalysts including pertinent information on processes and quantities 1943-1944.	P
52.	H	Misc. Notes and graphs from engine test laboratory concerning relationships between FeCO and TeL. (1939) Engine tests on fuel blends (1944)	P
53.	E	Original laboratory notes on reactions of "Butal" with various organic acids.	
54.	H	Original notes and report on experiments for measuring vaporlocking tendency in lab. apparatus and in engines (1940)	
55.	H	I.G. report (1941) on reference fuels and accuracy of octane number determination.	C
56.	E	Miscellaneous data regarding wax oxidation in connection with "Parostol" manufacture.	P
57.	G	Miscellaneous analytical methods useful in connection with F.T. synthesis.	
58.	E	Charts representing course of oxidation of paraffin wax by blowing with air.	
59.	B	Tests on Moers coal and ash therefrom (1938)	
60.	G	Collection of analytical methods applicable to Fischer-Tropsch operations and products.	P
61.	B	Misc. notes on fine purification experiments and regeneration of catalyst, also tests on shift converter catalyst.	
62.	E	Numbers and titles of patent applications filed by Rheinpreussion-Moers Sept. 1943 to Sept. 1944.	C

RESTRICTED

RESTRICTED

<u>Doc. No.</u>	<u>Class</u>	<u>Title</u>	<u>Micro films</u>
63.	E	Laboratory subject classification for files etc.	
64.	E	Original laboratory notes on conversion of Kogasin to lube oils with $AlCl_3$ (1934-1935)	
65.	B	Technology and Prospects of Oxygen Utilization Karwat, Brenn. Chemie <u>17</u> , 141-149 (1936)	
66.	E	Diagram showing methods of converting coal and possible products therefrom (different from Doc 70)	C
67.	C	Note book containing miscellaneous calculations, partly on diesel fuel blends.	
68.	B	Notes on experiments on purification of synthesis gas with bleaching earth.	
69.	B	Misc. data on effect of active charcoal adsorption ahead of fine purification.	
70.	E	Diagram showing methods of converting coal and possible products therefrom (different from Doc 66)	C
71.	C	Misc. data on synthesis oven and charcoal absorber operation.	
72.	D	Paper by Grimme on recovering light hydrocarbons by charcoal absorption presented at second Chem. Eng. Congress, Berlin 1940.	
73.	C	Experimental data on charcoal absorption and contact oven performance 1941-1942.	
74.	A	Monthly production estimates and reports for Arsy including some product tests, and related correspondence. Oct. 1941 to date.	P
75.	I	Correspondence and documents cleared through Arsyn regarding prevention and repair of bomb damage including hydrogenation plants.	C
76.	G	Misc. documents on nomenclature and analytical methods.	
77.	G	Miscellaneous documents on physical and chemical properties.	
78.	D	Flow diagram of Diesel fuel refining process	
79.	H	Tech. Hochschule Stuttgart report on design of engine for testing Diesel or Otto cycle engine fuels.	C

RESTRICTED

<u>Doc.</u> <u>No.</u>	<u>Class</u>	<u>Title</u>	<u>Micro</u> <u>films</u>
80.	D	Experimental data on substitution of Kogasin for wash oil in benzol recovery. Sept. 1939.	
81.	E	Copies of patent applications filed by Ruhrchemie relating to Fischer-Tropsch from Dec. 1937 to July 1939.	
82.	A	Correspondence with Arsy re production of and specifications for benzol, diesel fuel etc.	P
83.	E	Letter 22 June 1944 re use of sodium-propyl-butyl sulfate in spinning bath for synthetic fibres.	
84.	E	Miscellaneous documents relating to preparation and use of higher alcohols, fatty acids, special waxes etc.	P
85.	E	Miscellaneous correspondence and data re production and use of "Pantoxyl" oxidized wax.	P
86.	E	Private report 3 Feb. 1942 on review of the Estonian oil shale industry.	C
87.	C	Blank operating report forms used by Brabag.	
88.	A	Actual and prospective production of liquefied gas by all Fischer-Tropsch Plants 1939-1940.	C
89.	A	Misc. notes on unidentified conference re F.T. synthesis plants' equipment and capacities (July 1939)	
90.	C	Diagram of sources of C ₃ and C ₄ hydrocarbon in connection with F.T. synthesis (cf 45)	
91.	B	Photos and description of Pintsch apparatus for charging coke to water gas generator and arranging gas cracker with latter.	
92.	C	Informal reports from Brabag (Ruhland) Jan 1938 on influence of synthesis gas and its impurities on catalyst capacity and life.	C
93.	E	Minutes of conferences of Fischer-Tropsch plant representatives on research and operating problems Nov. 1936 to July 1939.	

RESTRICTED

<u>Doc. No.</u>	<u>Class</u>	<u>Title</u>	<u>Micro films</u>
94.	B	Letter 8 July 1941 from Ruhrchemie to licensees regarding countercurrent operation of fine purification towers to increase catalyst life.	
95.	C	Miscellaneous documents relating to catalyst composition, catalyst handling and regeneration.	P
96.	C	Minutes of conferences at Holten July-Aug. 1936 on progress of new construction (Ruhrbenzin?)	
97.	F	Miscellaneous documents relating to industrial relations, military service of personnel etc.	P
98.	E	Miscellaneous research programs and summaries including Pantoxyl etc.	C
99.	H	Data on reproducibility of octeine number determination and minutes of 1941 conferences on this subject.	P
100.	H	Fuel consumption test data for engine w 24 Engine and fuel unidentified (1940)	
101.	F	Cards from personnel files at Moers for technical employees and others who might be useful sources of information.	
102.	F	Documents relating to shipment of laboratory and plant equipment, stocks etc. to new locations 1944-1945.	P
103.	G	Chemical Testing Methods for the preparation of Fuels I Coking Industry. E. Merck, Verlag Chemie 1943.	P
104.	G	Publications of Vid. Eisenhüttenleute on Laboratory P procedures for the coking industry.	
105.	G	V.D.I. bulletin DIN 1952 (1943) on procedures for measurement of fluid flow with orifices etc.	P

RESTRICTED

PLOT PLANS AND DIAGRAMS SEPARATELY LISTED
ALL IN MIRS SACK # 1481

1. Plot plan of Synthetic Fuel Plant 1939.
2. Plot plan of Coking Plant (undated).
3. Plot plan of Coking Plant (undated).
4. Plot plan of Coking Plant 1938.
5. Plot plan of Coking Plant 1938.
6. Plot plan of Synthetic Fuel plant colored to show dates of construction through 1943.
7. Flow diagram of Fischer-Tropsch process.

RESTRICTED

LIST OF SAMPLES
TAKEN FROM
RHEINPREUSSEN-MOERS PLANT

1. Milk can (not Jerrican) filled with benzin from tank car at Rheinpreussen. Container incorrectly named because sample was not transferred to a Jerrican at 21 Army Group Headquarters for shipment as requested. Sample taken from first tank car at Moers (Deutsche Reichsbahn - Essen - 508394) and the same as smaller sample 5. Composition uncertain. To be subjected to Engler distillation and determination of specific gravity and Bromine Addition No.
2. Milk can filled with Fischer-Tropsch catalyst. This to be sampled carefully under CO₂ for analysis and activity test and the balance sealed for future disposal.
3. One of two pieces of wax (from catalyst washing). To be subjected to vacuum fractionation and determination of melting points.
4. Jerrican filled with illumination oil from drums in box car at Moers (not "Benzene from second tank car"). Identity uncertain, although drum was marked "Leuchtol". To be tested like Sample 1.
5. Small can of Benzin from Rheinpreussen I. Sample taken from same tank car as Sample No. 1. Identity uncertain. To be subjected to Engler distillation, determination of specific gravity and Bromine addition No.
6. Can shift convertor catalyst Rheinpreussen. Supposed to be fresh catalyst (of unknown composition) for water-gas shift reaction. To be analysed.
7. Small can of benzin from Rheinpreussen II. Sample taken from second tank car (F.S. Italia Mo. 551033) in Moers plant. Identity uncertain, and no more sample available. To be tested like Sample 5.
8. Can rough purification catalyst for sulfur. Supposed to be "Luxmasse". To be analysed.
9. Can fine sulfur purification catalyst. Supposed to be Luxmasse plus sodium carbonate. To be analyzed.
10. Small can of Fischer-Tropsch catalyst. To be handled like Sample 2. Sample 10 came from same Kubel in Moers plant as Sample 2 but was taken with less precaution against oxidation.

RESTRICTED

CIOS TARGET 30/5105
RHEINPREUSSEN-HOMBERG.
MOERS-MEERBECK

CLASSIFICATION OF CAPTURED DOCUMENTS FOR STORAGE.

16 April, 1945

<u>MIRS</u> <u>BAG</u>	<u>BUNDLE</u>	<u>DOCUMENTS</u>
1477	A(2)	1, 2, 3, 4, 5, 6, 9, 10, 14, 15, 17, 20, 23, 42, 51, 79, 82, 88, 89, 16.
1477	B	11, 21, 24, 25, 29, 30, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 59, 61, 65, 68, 69, 91, 94.
1477	C	7, 8, 18, 19, 27, 45, 48, 67, 71, 87, 90, 92, 95, 96, 47.
1478	D	26, 28, 31, 72, 78, 80.
1478	E	12, 13, 49, 50, 53, 56, 58, 62, 63, 64, 66, 70, 81, 83, 84, 85, 86, 93, 98.
1478	F	22, 97, 101, 102.
1478	G	46, 57, 60, 76, 77, 103, 104, 105.
1478	H	43, 44, 52, 54, 79, 99, 100, 55.
1478	I	75.
1481	Plans and Maps No. 1, 2, 3, 4, 5, 6 and 7.	

RESTRICTED