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REEL 3

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U.S. GOVERNMENT TECHNICAL OIL MISSION

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BAG 2168(4.03) - I.G. LUDWIGSHAFEN - OPPAU

BAG 2745(4.08) - I.G. GELSENBORG

- 1. Continuation of Section 13, Reel 2
- 2. Monthly reports on Fischer synthesis Plant at Wintershall
 A. G. Lutzkendorf consists of summery sheet under the following headings: 1, coal used; 2, heating gas; 3, synthesis gas;
 4, gas purification; 5, Fischer synthesis and 6, cxygen and nitrogen. The "Summary Sheet" is followed by "Detail" sheets of explanatory notes.

The following individual items obtain:-

2 b.	(1)	Monthly repert Group A Summary Sheet Detail Sheet	August, 1943 1 page 1 page
	(2)	Report of June, 1943 Summary Sheet Group C Detail Sheet Group B Detail Sheet	3 pages 1 page 2 pages
	(3)	Monthly Report Group A Summary Sheet Detail Sheet	Juno, 1943 1 page 1 page
•	(4)	Monthly Report "D" Utilities Requirements Summary Sheet Detail Sheet	June, 1943 2 pages 2 pages
,	(5)	Monthly Report Group A Summary Sheet	September, 1943 1 page
	(6)	Monthly Report "D" Utilities Requirements Summary Sheet	May, 1944 2 pages
٠.	(7)	List of Personnel - Chemists and Engi gives vital statistics	incers 45 pages
	(8)	List of personnel at Oberrheim	56 pages
•	(9)	A letter (Marked Secret) mentioning a on a convention on "Analytic and Expo Micro-Separation Technic on Hydrocard	erimental
		tures	April 5, 1940
	-		l page.

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- (10) A letter on time needed to give a lecture on the item in #9.
- (11) A report on the convention in item #9

 "Analytic & Micro-Separation of Hydrocarbon Oils from
 Methanol Synthesis under various conditions Tables
 & Curves also apparatus. 9 pages.

 Item #11 Translation Suggested.
- (12) A report "Addition to Report on the Isolation and Identification of Hydrocarbons according to New Methods" an outline of the report: 1, Micro-Technic; 2, Determination of Olefines; 3, Determination of Dienes; 4, Determination of Paraffins and 5, Separation of Artificial Mixtures. The report contains tables and diagrams of apparatus. 51 pages. Item #12 Translation Suggested.
- (13) Paper by K. B. Metzger March, 1940
 Concerning the shifting of explosive limit of mixtures of ethylene and ethylene oxide; ethylene oxide and oxygen mixtures by addition of nitrogin and CO₂ respectively.
 Literature references and tables given. 16 pages.
- (14) Paper by Dr. Jannek given before the cooperative society of "the chemistry of aliphatic and cyclo-aliphatic hydrocarbons" on "The Synthesis and Conversion of Simple Hydrocarbons Paper dated May 24, 1940. 15 pages.
- (15) Monthly Report Group A
 Summary Sheet on Fischer Synthesis 4 pages.
- (16) Monthly Report Group B February, 1944
 Summary and Detail Sheets 2 pages.
- (17) Monthly Report Group C February, 1944
 Summary and Detail Sheets 2 pages.
- (18) Monthly Report Group D October, 1943
 Utilities Requirements 2 pages
- (19) Monthly Report September, 1943
 Utilities Requirements 2 pages
 Summary Sheet on Progress 4 pages
- (20) Monthly Report Group C September, 1943 6 pages
- (21) Monthly Report Group B August, 1943 2 pages
- (22) An Experiment by F. Winkler, dated July 26, 1939.
 Ethylene (from the hydrogenation in the electric arc)
 enriched by copper wash.

 5 pages

- (23) Paper on "The Continuous Production of Succinic Acid from Tetra-hydro-furane and nitric acid. October 6, 1942 . 19 pages.
- (24) Procedure for the production of n and i butyraldehyde or the corresponding alcohols - A write-up for a patent. March 19, 1943 4 pages.
- (25) Procedure for the production of Poly-hydric alcohols. A patent application (copy). March 6, 1943. 1 page.
- (26) Procedure for the production of dichlorethane. A patent application November 23, 1943. 2 pages.
- Procedure for the production of ethylene glycol. Patent application July 9, 1942. 7 pages.
- Procedure for the production of Halogin Acid Solutions -(28)Addition to Patent Application #1.71 303 IV b 12i March 26, 1942 4 pages
- Steam and Electricity (Economy of) Requirements at (29)Lutzendorf. 14 pages
- (30) Letter Dated November 25, 1940 to the Ministry of Economics Division of Power on Power requirements
- Report on Power Production and Operation Safety (31)2 pages
- (32) Directive on Work Schedule l page End of Bag #2168 Target No. 30/4.03
- Bag #2745 Target 30/4.08 Gelsenberg (Note - This new target number continues on the same roll)
- (1) Summary Sheet of Bag 2745 Target 30/4.08 lists 20 items (18 of which are on this roll which is identified as Roll 3). The Summary sheet is in English.
 - (2) Title page in English Coal Hydro 1 page
 - (3) Item #1 Monthly Report
 - (1) Operating Data on Hydrogenation works at Nordstern 2 pages.
 - (2) Monthly Report March 1944 (3) Monthly Report February 1944 (4) Monthly Report January 1944
 - 2 pages 2 pages

 - (5) Monthly Report December 1943
 - 2 pages
 2 pages
 2 pages (6) Monthly Report October 1943

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	(7) Monthly Report September 1943 3 pages (8) Monthly Report August 1943 3 pages (9) Monthly Report July 1943 2 pages (10) Monthly Report June 1943 2 pages (11) Monthly Report May 1943 2 pages (12) Monthly Report March 1943 2 pages
(4)	Item #2 - Monthly Total Balance - Coal, Catalysts, Oil (In English) l page (1) Total Balance Sheets October 1941 - January 1940 10 pages
(5)	Item #3 - Monthly Total Gas Balance December 1940 - January 1940 12 pages
(6)	Item #4 - Monthly Gas Summaries September 1941 - January 1940 16 pages
(7)	Item #5 - Monthly Total Shipments October 1941 - January 1941 - 10 pages
(8)	Item #6 - Monthly Barge Shipments 8 pages
(9)	Item #7 - Monthly Summaries - Shipping and Isobutane Plant - September 1941 - September 1940 8 pages
(10)	Item #8 - Monthly Summaries A - Middle Oil Distillation July 1941 - December 1940 14 pages
	Item #9 - Monthly Summaries - Distillation and Stabilizing, October 1941 - January 1941 11 pages
(12)	Item #10 - Monthly Summaries - Centrifuge Plant October 1941 - January 1940 24 pages
(13)	Item #11 - Monthly Summaries - Carbonization Plant October 1941 - January 1940 24 pages
(14)	Item #12 - Monthly Summaries - Coal Grinding October 1941 - January 1941 10 pages
(15)	Item #13 - Northly Summaries - Light Ends Recovery July 1941 23 pages
(16)	Item #14 - Monthly Summary Coal Stalls December 1940 - December 1941 22 pages
(17)	Item #15 - Monthly Summaries Saturation and Splitting October 1941 - December 1940 22 pages

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(18)	Item #16 Yearly Stall - Operations Curves 1942 - 1943 (1) Monthly usage of stalls (chambers) 1942 - 1943 (2) Charges and yields 1942 - 1943 (3) Chemical operation data on coal phase - yields of different fractions. Curves are plotted with time as abscissa and % yields as ordinate.
(19)	Item #17 Coal Stalls - Effect of ash - hydrogen loss - light hydrocarbons. (1) Influence of ash content on coal phase hydrogen l page (2) Hydrogen losses and gaseous hydrocarbons in coal phase 4 pages. (3) A short visit to Scholven - Discussion - the charging capacity of ovens with coal paste. 2 pages.
(20)	Item #18 Operation Reports - Saturation and Splitting stalls (1) June 1944 - February 1944 plus general report 8 pages (2) Discontinuation and enlargement of operating stall - operational period December 1940 - March 1940 - gives reasons for discontinuation. 4 pages. (3) Pressure Drop Data through Equipment. 1 page. (4) Machine Shop Forms 3 pages (5) Equipment List (use not stated) 1 page (6) Discontinuation of Benzine Stall 305 (due to air raid) October 15, 1940. Rebuilt according to stall 301
	(7) Operation Report Benzine Stall 301 July 1944 9 pages (8) Report on remodeling of experimental stall 302 after 9th period of operation. February 1943 1 page. (9) Machine Shop Forms 5 pages (10) Equipment for experimental hydrogenation stall 302 - 3 compartments in chamber February 20, 1943 1 page (11) Preliminary report on experimental stall 302
	February 1943 (12) Discontinuation of Stall 302 April 21, 1941 (13) Report on operation of stall 302 covering different periods (6 in all) (14) Discontinuation of chamber 303 March 30, 1940 4 pages (15) Repair of chamber 303 1 page (16) Memorandum - air raid - chamber 303 August 12, 1943 1 page (17) Flow sheet (gas-phase) Chamber 303 August 1942 1 page (19) Production results with new hydrogenation catalyst
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(22)	Experiences with catalyst 7846 W 250 with large scale
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(23)	Preliminary Hydrogenation experiment with Catalyst
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(25)	Operation report experimental chamber 303
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(26)	Short report on last operational period - experimental
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(27)	Preliminary testing of experimental chamber 304
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(34)	Method of measurement (preliminary testing) of chamber
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(35)	Repair work on chamber 305 - after resumption of
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(36)	Construction of Oven 6434 of chember 305
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(37)	Discontinuation of Benzine chamber 305
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(38)	Discontinuation of Benzine chamber 304
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July 9, 1945