

INDEX TO

REEL

4

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U.S. GOVERNMENT TECHNICAL OIL MISSION
INDEX - MICROFILM - REEL-4
BAG 2745(4.08) - I.G. GELSENBERG

Item 19 - Operating Reports - Coal Stalls

- (1) July 4, 1944 1 page
Coal Phase in June 1944 - Operational Report
- (2) June 7, 1944 4 pages
Operational Report - Monthly for May, 1944
- (3) May 2, 1944 2 pages
Operational Report - Monthly for April, 1944
- (4) April 6, 1944 3 pages
Monthly Operation Report - Coal Phase for March, 1944
- (5) March 7, 1944 4 pages
Monthly Operation Report Coal Phase for February, 1944
- (6) February 7, 1944 3 pages
Monthly Operation Report - Coal Phase for January 1944
- (7) July 27, 1944 11 pages
Report on High Pressure Operation - June 1944
- (8) July, 1944 13 pages
Report on High Pressure Operation - June 1944
An extended report on results under different conditions with tables.
- (9) June 6, 1944 16 pages
Report on High Pressure Operation - May, 1944.
An extended report on results in different phases under stated conditions of temperature and pressure.
- (10) April 7, 1943 1 page
Operational Report Coal Phase during March, 1943
- (11) December 5, 1941 2 pages
Coal Phase Operation Report - November, 1941
- (12) November 13, 1941 2 pages
Operational Report Coal Phase - October, 1941
- (13) October 13, 1941 1 page
Operational Report Coal Phase - September, 1941
- (14) March 7, 1942 2 pages
Operational Report Coal Phase - February, 1942

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| (15) | July 7, 1942
Coal Phase | --June, 1942 | 1 page |
| (16) | June 3, 1942
Coal Phase | --May, 1942 | 1 page |
| (17) | May 4, 1942
Coal Phase | --April, 1942 | 1 page |
| (18) | October 3, 1942
Coal Phase | --September, 1942 | 1 page |
| (19) | September 2, 1942
Coal Phase | --August, 1942 | 1 page |
| (20) | August 4, 1942
Coal Phase | --July, 1942 | 1 page |
| (21) | February 16, 1943
Equipment, changes in | | 1 page |
| (22) | February 2, 1942
Equipment, changes in | | 1 page |
| (23) | December 2, 1941
Preliminary Experience with injection of cold Coal Paste into Coal Chamber 703
Equipment changes (discussed) | | 2 pages |
| (24) | Temperature Graph of Chamber 703 -- November, 1941 | | 1 page |
| (25) | November 14, 1941
Discussion in Ludwighafén -- Report of Dr. Urban.
Favorable experience with injection of cold Coal Phase using 4 chambers. Increase of Coal charge possible. | | 2 pages |
| (26) | April 22, 1944
Overhauling of Chamber 704 | | 2 pages |
| (27) | December 17, 1943
Report on experiments to heat coal paste with hot gas. Conditions of experiment given and results. Tables of calculations and graph. (Translation suggested.) | | 10 pages |
| (28) | July 7, 1942
Comparison of Coal Chambers charged with different methods of injection. Graph included. | | 3 pages |
| (29) | July 27, 1943
Discontinuation of Chamber 704 | | 2 pages |

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| (30) | April 13, 1943
Discontinuation and Repair of Chamber 706 | 3 pages |
| (31) | Graph of Operation Results of Chamber 706
Hours of operation <u>vs</u> pressure drop and other items. | 1 page |
| (32) | April 22, 1943
Examination of Chamber 702
Trouble--regenerator short circuit | 1 page |
| (33) | April 13, 1943
Repair of coke -up-Chamber 703 | 1 page |
| (34) | March 27, 1943
File Copy - Relation between high pressure method
and behavior of sludge centrifuge.
Graphs included. | 6 pages |
| (35) | March 8, 1943
Discussion--Plant Production, checking of | 3 pages |
| (36) | November 6, 1942
Table of working hours of different chambers. | 3 pages |
| (37) | September 26, 1941
File Notice. Repair of Preheater after fire
on September 9, 1941
Sketch given. | 4 pages |
| (38) | September 13, 1941
File Notice--Interruption of Preheater | 2 pages |
| (39) | Date not shown
Memorandum --- Repair of coal Chamber No. 5 | 2 pages |
| (40) | February 4, 1943
Calculations on Temperature Conditions and
Crust formations in paste hairpins and proper
materials of construction. Graphs included.
Graphs show specific heat of coal paste with re-
spect to solid content within limits of 250° -
450° C. and solid content varying between 30 - 60%;
pressure drop in hair pins without encrustation at
various rates of paste passage. (translation suggested) | 7 pages |

Item 20 - Analytical Methods from Gelsenberg

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|-----|--------|---------------|--------|
| (1) | Letter | July 22, 1944 | 1 page |
| (2) | Form | | 1 page |

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| (1) | Report No. 571
On Technical Experimental Set-up at Oppau
Semi-annual Report—Knock rating of fuels.
a. Preliminary technical condition for
furnishing high octane fuel.
b. Method of shipment, conditions to
be met. (Specifications for motor
fuel.) | 10 pages |
| (4) | Letter - Complaint - Quality of material
deteriorated. June 7, 1941 | 1 page |
| (5) | Testing of Aviation Fuel | 4 pages |
| (6) | Report No. 571 (same as above) | 13 pages |
| (7) | Report No. 489
Octane Rating Testing according to Oppauer Method
Instruments shown and sketch of machine | 16 pages |
| (8) | Possible sources of error in procedure to determine
octane number | 1 page |
| (9) | Graph. Composition of Oxygen free fuels as a
function of density. | |
| (10) | Report No. 490 -- Fuel Rating | 14 pages |
| (11) | September 26, 1938
Sieve analysis of coal | 1 page |
| (12) | Composition of Fuel (Gaseous) | 1 page |
| (13) | May 25, 1940
The present status of asphalt research.
A paper on asphalt composition. Literature
reference | 6 pages |
| (14) | February 12, 1942
Concerning a method of decomposition of asphalt
residue from the gas phase in the high-pressure
hydrogenation. | 5 pages |
| (15) | August 16, 1943
Memorandum. The Influence of Tail/Gas on
compressor oil. | 3 pages |
| (16) | September 25, 1944
Report -- Determination of Phenol in Middle Oil. | 2 pages |
| (17) | January 12, 1942
Memorandum-Basic Constituents of (Pyridines) in
production during Hydrogenation. | 2 pages |

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(18)	September 26, 1938 Liquifying--Dissolving of Heavy Oils, Waxes, in Benzine	1 page
(19)	September 26, 1938 Solid Determination	1 page
(20)	September 26, 1938 Asphalt Determination	1 page
(21)	Water Determination--Carbide Method	1 page
(22)	Residual Material	1 page
(23)	Soda Determination	1 page
(24)	September 24, 1938 Vacuum Distillation	1 page
(25)	Sulfur Determination	2 pages
(26)	September 24, 1938 Residue from Sulfur Determination Soluble in Benzine.	
(27)	Bitumen Determination of Coal	1 page
(28)	Determination of Volatile Gases	
(29)	September 26, 1938 Carbon and Hydrogen Determination	
(30)	Nitrogen Determination	1 page
(31)	Chlorine Determination	1 page
(32)	Flash Temperature	1 page
(33)	Sulfur Removal from C ₃ and C ₄	4 pages
(34)	Examination of Coal	5 pages
(35)	Iron Determination in Coal	1 page
(36)	Examination of Coal Paste	3 pages
(37)	Examination of Vehicle Oil	1 page
(38)	Examination of Residue in Coal Chamber	1 page
(39)	Examination of Gasoline Residue	1 page
(40)	Form for Examination of Residues	1 page

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| (41) | Small Scale Distillation of Benzine Residue | 1 page |
| (42) | Phenol Determination in Residues | 1 page |
| (43) | Examination of Slush | 1 page |
| (44) | Low Temperature Carbonization Residue | |
| (45) | Summary of all items above | 1 page |
| (46) | Examination of Injection Product | 1 page |
| (47) | CO ₂ -- Determination | 1 page |
| (48) | Composition of Fuel Gas | 1 page |
| (49) | Leuna--Fuel Gas. (Sketch of apparatus given) | 6 pages |
| (50) | Claus oven gas--Determination H ₂ S and SO ₂ | 1 page |
| (51) | Analysis of Alkalyzed Bases
Sketch of apparatus given | 11 pages |
| (52) | Method of Analysis--relating to Hydrogen Purification | 16 pages |
| (53) | Phenolic Oil. Determination in Leuna Hydrogenation Works. Sketch given | 13 pages |

Bag 2747

Target No. 30/4.08

Gelsenberg

Summary (in English) of items to be found.

28 Items listed.

Items No. 1--Minutes of meeting on plant operation 2 pages

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| 1. | March 16, 1944
Discussion of March 16, 1944 | 2 pages |
| 2. | January 18, 1944
Discussion on Production | 2 pages |
| 3. | November 16, 1943
Board of Directors Meeting | 2 pages |
| 4. | November 8, 1943
Discussion on Production | 2 pages |
| 5. | September 14, 1943
Board of Directors Meeting | 2 pages |
| 6. | September 8, 1943
Use of Iron Sulphate | 1 page |

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| 7. | September 7, 1943
Discussion on Production | 2 pages |
| 8. | July 20, 1943
Board of Directors Meeting | 2 pages |
| 9. | July 19, 1943
Production Discussion | 2 pages |
| 10. | May 18, 1943
Board of Directors Meeting | 2 pages |
| 11. | February 17, 1943
Directors Meeting | 2 pages |
| 12. | February 15, 1943
Production Discussion | 1 page |
| 13. | February 15, 1943
Production Discussion | 2 pages |
| 14. | December 22, 1942
Discussion of Production | 2 pages |
| 15. | October 22, 1942
Discussion of Production | 2 pages |
| 16. | June 22, 1942
Discussion of Production | 2 pages |
| 17. | October 30, 1943
Clogging up of Hot Gas Separator of Coal Chamber No. 2 | 3 pages |
| 18. | February 7, 1944
Coke in Residue Sludge | 3 pages |
| <hr/> | | |
| 19. | June 17, 1942
Memorandum on Hydrogenation Residues | 2 pages |

Item No. 2--Hydrogen Production--Alkacid

- | | | |
|----|---|----------|
| 1. | October, 1941
Summary of Utilities--Operation Sheets | 15 pages |
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Item No. 3--Fuel Gas, N₂ and CO₂

- | | | |
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| 1. | October, 1941
Summary Sheets. | 21 pages |
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Item No. 4--Fuel Gas and Butane

1. October 1941 Summary Sheets 21 pages

Item No. 5--Alkacid - - Building 6

1. Summary Sheets--different months 5 pages

Item No. 6--Alkacid - Buildings 52 and 53

1. December 1941-February Summary Sheets 11 pages

Item No. 7--Gas Washing and Compression

1. Summary Sheets 21 pages

Item No. 8--CO₂ and CO Removal

1. Summary Sheets 13 pages

Item No. 9--Water Gas

1. Summary Sheets 8 pages

Item No. 10--Water Gas Monthly Reports

1. Month of April 1944. Hydrogen Generation Curve (Graph) 18 pages
2. Month of March 1944. Hydrogen Generation Curves 16 pages
3. Hydrogen Production--Month of February 1944 16 pages
4. " " " " January 1944 13 pages
5. " " " " December 1943 7 pages
6. " " " " November 1943 6 pages
7. " " " " October 1943 13 pages
8. " " " " June 1943 2 pages
9. " " " " September 1943 6 pages
10. " " " " July 1943 6 pages

Item No. 11--Annual Reports--Hydrogen
1941-1943

1. Yearly Report Hydrogen Generation 1943-1944 12 pages

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2. Yearly Report Hydrogen Generation 1941-1942 9 pages
3. Yearly Report of Hydrogen Generation Group 1943-1944
Sketch of Generation Equipment. 68 pages

Item No. 12--CO Removal

1. CO₂ Purification--Sketch given 8 pages

Item No. 13--Hydrogenation Gas Analysis

1. Summary Sheets 6 pages
2. Memorandum--Analysis of Buna Gas. December 9, 1942 2 pages
3. Carbon Atoms in Gas
4. Total Production Sheet 7 pages

Item No. 14--Coal Analysis, Washing Tests,
Coal Preparation, Coal Prices

62 pages

Item No. 15--Phenols in Coal Stall Products

10 pages

Item No. 16--Analysis of Gasolines, etc.

20 pages

1. Photograph of Explosion Showing Destruction 2 pages

Item No. 17--Information on Politz Plant

1. Discussion (Report) on accident June 1942.
Cause of accident--opening of wrong valve
High pressure gas entered a chamber which could not
withstand the pressure. 10 pages
2. Memorandum--Exchange of Experiences October 1943 7 pages
3. Personnel Note 1 page
4. Report of visit to Politz October 11, 1943
Comparison between Politz and Gelsenberg--especially
coal chambers and in other respects. 12 pages
5. October 10, 1941
Description of work at Gelsenberg--chamber layout in
Buildings 21-26 and 121-126--sketch given. 5 pages

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