

FILM STUDY GROUP

REPORT

T.O.M. REEL No. 121

Prepared by

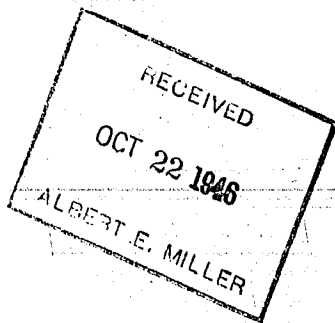
THE M. W. KELLOGG COMPANY

The M. W. Kellogg Co.

TECHNICAL OIL MISSION
INDEX - MICROFILM - REEL - 121
(Orig. Ident. Reel BM-8)

ITEM

1. Target 30/5.05, USSES Target GQ1511, Homberg
Correspondence and Account Re Royalty Payments to
Ruhchemie
2. Daily Operation Reports
3. Minutes of Fischer-Tropsch Conferences November, 1936
to July, 1939



SCANNING OF REEL #121
U. S. GOVERNMENT TECHNICAL OIL MISSION
CIOS TARGET 30/5.05 HOMBURG

Section I - Correspondence and accounts concerning royalty payments to Ruhrchemie. No technical value (183 Frames).

Section II - Daily operating reports comprising 63 frames of largely blank forms. Of no technical value.

Section III - Minutes of Fischer-Tropsch conferences. Nov. 1936
July 1939. (The minutes of the meetings are photographed on the reel in reverse chronological order. The discussions all dealt with cobalt catalysts and almost entirely with commercial operation. The pages of the report of each meeting are numbered but there is no designation on the frames of position on the reel. The frame numbers given are numbered from the start of the section).

Frames 1-26: Report of discussions during the conferences on May 5 and July 14, 1939, at Wanne Eickel and at Essen respectively, including cover letter from Ruhrchemie and list of the representatives present from various companies. The subjects discussed were: catalyst delivery problems, regeneration of catalysts, experience with magnesium activated catalysts, gas purification, catalyst discharging and use of 2.5% ThO₂ catalyst.

Frames 27-38: Various letters of invitation to meetings, acknowledgements, information on discharging catalysts, cover letters, etc.

Frames 39-52: Minutes of the Fischer-Tropsch meeting at Homberg on January 6, 1939. The discussion was concerned with a tank fire at Holten, composition and comparative experiences with thoria, magnesia, and thoria-magnesia catalysts and results of tests with the various catalyst compositions. Also discussed was the use of pelleted catalysts of 0.8-1.5 mm. and 1.5-3 mm. in diameter with the observation that the higher density catalysts apparently required higher temperature. Further discussion was on hydrogen requirements, comparative hydrogen requirements when using the various catalysts, effect of the stage in which fresh catalyst was charged, effect of using activated carbon before the synthesis stages and an experimental 5 atm. operation at Holten. A table is given showing the number of charges, the thoria content, and the particle size of the catalyst at the various plants.

Frames 53-64: Various letters of invitation, route directions and attendance list of various meetings.

Frames 65-79: Report of discussions at May 5, 1938 Fischer-Tropsch meeting at Homberg. Subjects discussed were: magnesium-containing catalysts, catalysts containing activated carbon, comparative experiences with catalysts at various plants, difficulties encountered such

as discharging ovens, obtaining of pure hydrogen for reduction, etc. and best $\text{ThO}_2:\text{MgO}$ ratio in a mixed catalyst (declared to be 1:1.6). Further discussion was on discharging of catalysts, regeneration, optimum ratio of Co:K_g and difficulty of H_2S removal in gases used for regeneration.

Frames 80-88: Various letters of invitation, etc.

Frames 89-97: Report of the meeting at Homberg on December 5, 1937. The discussion included synthesis gas purification, life of catalysts, catalyst discharging and cause of high water production at start of operation.

Frames 98-108: Various letters.

Frames 109-117: Report of the discussions at Raurel on Nov. 5, 1937. The subjects discussed were gas purification including coarse purification, fine purification, and after-purification with activated charcoal, catalyst quality and experience with discharging.

Frame 118: Cover letter for minutes of the October 1, 1937 meeting at Rubland.

Frames 119-124: Report of October 1, 1937 Fischer-Tropsch meeting at Rubland. The discussion covered gas purification, catalyst distribution, catalyst quality and charging and discharging catalysts.

Frames 125-127: Various letters.

Frames 128-134: Minutes of meeting at Holten on August 27, 1937. The discussion was on gas purification, catalyst distribution and quality, general operating questions and discharging of ovens.

Frames 135-140: Various letters (partially illegible) of invitation, expressing disagreement with certain results, and a cover letter for the minutes of the last meeting.

Frames 141-151: Minutes of the Fischer-Tropsch discussions at Berlin on July 30, 1937. The discussions cover coarse and fine gas purification, analysis of sulfur contents of gas, quality of catalysts, storing of catalysts in CO₂, discharging catalysts, distribution of catalyst, and composition of catalysts.

Frames 152-159: Various letters.

Frames 160-168: Discussions at H&uzel on July 2, 1937 on coarse and fine gas purification, discharge

ovens, quality of catalyst and production problems,
refining of gasoline and corrosion difficulties.

Frames 169-170: Invitation and cover letter.

Frames 171-184: Discussion on May 21, 1937 at
Ruhland on gas purification, discharge of ovens,
gasoline refining, employment of activated carbon,
physical and chemical properties of gasoline,
gasoline by TVP cracking and an operating report
blank. (A good deal of these frames are illegible).

Frames 185-205: Various letters (largely illegible).

Frames 206-214: Discussion at Raurel on February 5,
1937 on fine gas purification, charging of the ovens, gas
resistance of the catalyst, working up of the gasoline,
and neutralization of the diesel oil. Other subjects dis-
cussed were gasol, catalyst size and oven charging,
difficulties of temperature measurement in the catalyst,
and catalyst protection.

Frames 215-216: Cover letters for reports of Fischer-
Tropsch meetings.

Frames 217-230: Report of discussion during the confer-
ence on April 23, 1937 at Holten. The discussions covered
gas purification, charging and discharging ovens, opera-
tion of the ovens, catalyst size, catalyst quality, regen-
eration and adsorption on activated carbon. A set of

curves is given showing operation of the gas refining.

Frames 231-232: Letters concerning Nov. 27, 1936
meeting.

Frames 233-252: Minutes of the Fischer-Tropsch meet-
ing at Holten on November 27, 1936. The subjects
covered were gas purification, catalysts with varying
 ThO_2 content, $\text{H}_2:\text{CO}$ ratio in the various stages, effect
of catalyst on operation, extraction of the paraffin
from catalysts and condensation of the product gases
from the reactor. Other discussion was concerned with
the neutralization of the oil, use of active carbon,
results at various plants with the making up of the
gasoline from the activated charcoal adsorbers, gasol,
and a general discussion.

Frame 253-End. Duplicate of the Nov. 27, 1936 report
and some illegible frames.