

TARGET
30 / OPPORTUNITY.

DOCUMENTS EVACUATED
FROM THE RESIDENCE OF
DR. SCHAVE OF RUHRCHEMIE.

CONTINUED FROM
REEL #9 SERIES G.

LIST OF ITEMS

TARGET NO. ITEM 30/ OPPORTUNITY
DOCUMENTS EVACUATED FROM THE RESI-
DENCE OF DR SCHAUB OF RUHRCHEMIE

<u>CIOS</u> <u>NO.</u>	<u>REPT.</u> <u>NO.</u>	<u>TITLE</u>	<u>AUTHOR(S)</u>	<u>DATE</u>
<u>RUHR - BENZIN REPORTS</u>				
1	-	Ruhrbenzin results a propos the Co-operative Tests in the H.W.A. Test Engine (Diesel)	Schaub	9.11.38.
2	-	Report on Tests to clarify discrepancies in Octane No. Determination of Ruhrbenzin fuels.	Schaub	11.11.38.
3	-	Supplement to the Report: Position of the tests with C ₃ , C ₄ (liquefied Gases)	?	6.12.38.
4	-	Interim report on the tests to date with the Test Engine from the F.K.F. Stuttgart	Schaub	10. 2.39.
5	-	Progress report No. 2. Lubricating Oil tests on the Opel 1.3 ltr. Engine	Schaub	8. 5.39.
6	-	Report on test with mixtures of liquefied Gas (Gasol) and Gasoline	Schaub	4.12.39.
7	-	Progress report No 3. The importance of Engine conditions in the testing of Lubricating Oils.	Schaub	19. 1.40.
8	P101	An Apparatus for measuring the vapour lock of Gasoline	Velde Schaub	20. 6.40.
9	P102	Supercharged tests with the NSU 501.0SL Engine	Schaub	5. 9.40.
10	P103	Comparison of ES oil with other Diesel Oils with respect to Nozzle Coking	Schaub	5.10.40.
11.	P104	Tests with fuels of different density.	Schaub	9.12.40.
12.	P105	The Development of an Engine Test Method for Aero Engine Oils in the NSU 501 CSL Engine	Schaub	14.12.40.
13	P106	The testing of some Aviation Oils in the NSU Aviation Oil Test Engine	Schaub	20.12.40.
14	P107	Testing synthetic Aviation Oils of Low Pole Height	Schaub	24.12.40.
15	P108	SECRET. Report on Engine Testing of Ruhrchemie Synthetic Aero Engine Oils	Schaub	10. 1.41.
16	-	Evaluation of Fuels for Vapour Lock troubles in an engine.	Schaub Velde	19. 2.41.
17	P109	Report on the Engine testing of the synthetic Aviation Oil K1860 (Japanol)	Schaub	15. 5.41.
18	P110	The Development of an Engine Test for Lubricating Oils in relation to Piston seizure	Schaub	26. 5.41.

LIST OF ITEMS

(A) RUHRBENZIN REPORTS
(continued)

PAGE 2

<u>CIOS NO</u>	<u>REPT. NO.</u>	<u>TITLE</u>	<u>AUTHOR(S)</u>	<u>DATE</u>
19	P111	SECRET. Report on Engine Tests of Synthetic Aviation Oil K.1880	Schaub	7. 7.41.
20	P112	Testing various Schrnacht Standard Oils for Piston seizure in the Triumph Engine	Schaub	1. 8.41.
21	P113	Comparison of Supercharge Tests in the NSU Engine of Ruhrbenzin and the BMW 132 Engine of the Tech. Prüfstand, Oppau	Schaub	6. 9.41.
22	-	Extract from a report on Tests with Gear Oils by the Rheinmetall-Borsig A.G.	Schaub	30.10.41.
23	P114	Engine Tests of the Aviation Oil K1929	Schaub	7. 1.42.
24	P116	Influence of Viscosity and various additives on the behaviour of Synthetic Oils in Engine Tests in relation to Piston seizure	Schaub	12. 1.42.
25	P115	Development of a Test for Engine Oils relative to Piston Seizure	Schaub	15. 1.42.
26	P117	Testing 4 Engine Oils for Piston Seizure	Schaub	29. 1.42.
27	P118	Ease of Ignition of R.C.H.Cetane	Schaub	30. 3.42.
28	P119	SECRET. Oil Testing in a NSU Engine	Schaub	25. 4.42.
29	P120	Dilution of Engine Oils for Winter Operation	Schaub	22. 5.42.
30	-	(B) - RUHRCHEMIE REPORTS Report on Lubrication ability investigations	Lediney	3. 8.38.
31	-	Humboldt-Deutz Engine Tests	?	20. 1.39.
32	-	On the Question of the Determination of Asphalt Contents in Aged Lub. Oils	?	30. 4.42.
33	P121	Working out a method for testing Engine Oils for Ring sticking, aging and wear	Schaub	9. 6.42.
34.	P122	The behaviour of different Commercial Aviation and Automotive Engine Oils in relation to Piston seizure	Schaub	13. 6.42.
35	P123	Dilution of Engine Oils for Winter operation	"	
36	P124	Aviation Oil Blend K1951 from RCH Bright stock and a low viscosity mineral component from Nereg	"	10. 9.42.
37	P125	Evaluation of the HVA Test Oil, 3370 (ME96 - Ester Oil from IG)	"	11. 9.42.
38	-	Preliminary Report: Engine Oil Test No 3370 (ME96 Ester Oil)	Schaub	1. 7.42.
39.	-	Analytical investigation of an Ester oil from I.G. Farben	Röttig	28. 8.42.
40.	P125a	Testing Engine Oil 3370	Schaub	8. 4.43.
41.	P126	Influence of viscosity on Oil Consumption	Schaub	19. 9.42.
42.	P127	On the lubrication effect of thin Engine Oils (Winter Oils)	Schaub	21. 9.42.

LIST OF ITEMS

PAGE 3.

(B.)

R U H R C H E M I E R E P O R T S (continued)

<u>OIOS NO.</u>	<u>REPT NO.</u>	<u>TITLE</u>	<u>AUTHOR(S)</u>	<u>DATE</u>
43	P128	Aviation Oil 3344 from the Main Plant	Schaub	6.10.42.
44	P129	Aviation Oil 1970 from the Main Laboratory	Schaub	4. 1.43.
45	P130	The Effect of Addition of Oppanol on the behaviour of Engine Oil	Schaub	27. 2.43.
46	P131	The Influence of Oppanol addition on wear	Schaub	11. 3.43.
47	P132	Aviation Oil Blend K1951/2 made from inhibited RCH Bright Stock and Nerag Oil	Schaub	8. 4.43.
48	P133	Investigation of Engine Oil 3698	Schaub	12. 4.43.
49	P134	Investigation of Engine Oil from Nerag (N.1)	Schaub	12. 4.43.
50	P135	Investigation of a Nerag current Wehrmacht Winter Oil (RCH Reference :-N2)	Schaub	4. 5.43.
51	P136	Investigation of 3 I.C.Farben. Winter Oils, MA46, MA48 and MA49	Schaub	5. 5.43.
52	P137	Starting I.C.Engines at Low Temperatures	Schaub	29. 6.43.
53	P138	Investigation of the Ester Oil E1 from the RCH Research Laboratory	Schaub	6. 7.43.
54	P139	Testing Engine Oil 3693 in relation to Piston Seizure	Schaub	17. 9.43.
55	P140	Knock measurement of Synthesis-Benzin dependant on the Ignition system	Schaub	1.11.43.
56	P141	On the pumping behaviour of lubricants at low temperatures	Schaub	29.11.43.
57	P143	Cranking Test with Rumanian Oil	Schaub	29.12.43.
58	P144	Testing an Aero Engine Lubricant SS1060 for Piston seizure	Schaub	7. 3.44.
59	P145	The foaming of Lubricating Oils	Schaub	17. 3.44.
60	P146	Testing the Aviation Oil sample K2015 of "Molaj"	Schaub	17. 6.44.
61	P147	Starting I.C.Engines at low temperatures 2. Interim Report	Schaub	27. 6.44.
62	P148	Testing Gear Oils for heat stability	Schaub	29. 8.44.
63	P149	Preliminary Tests with the 4 Ball Apparatus	Becker & Schaub	26. 9.44.
64	P150	Cold Testing Gear Oils in the Switch Gear AK7-200	Schaub	29. 9.44.
65	P151	The Evaluation of Lubricants according to Wear in an Engine	Schaub	15.11.44.

LIST OF ITEMS

PAGE 4.

(B.) RUHRCHEMIE REPORTS
(continued)

CIGS NO.	REPT. NO.	TITLE	AUTHOR(S)	DATE
66	P152	Ageing Behaviour of the Aviation Blend K2025 (with RCH bright stock, not inhibited)	Schaub	19.10.44.
67	P153	Comparison of Synthetic Residua and Distillate Oil of similar Viscosity for Clarification of the Effect of Bright Stock Components	Schaub	21.10.44.
68	P154	Testing various E.P.additions to Current Synthesis Oil, combined with Investigations on Various Methods for Testing Lubrication ability	Schaub	2. 11.44.
69	P155	Tests with fuels of Different Boiling Range	Schaub	16.11.44.
70	P156	Report on the incomplete Gear Oil Test	Schaub	14. 2.45.
71	P157	Report on the Vapour Lock Correlation Test of the GKH	Schaub	14. 2.45.

(C.) START OF REEL # 9 - SERIES G.
DEUTSCHE KRAFTFAHRFORSCHUNG

72	75	On the attack of Anti-freeze materials on Metal and Rubber (Staatlichen Motorisprufungsamt, Berlin-Dahlem)	Schikorr & Alex	
73	52	The State of Knowledge on Mixture Formation in I.C. and Diesel Engines. (T.H. Dresden)	Zinner	
74	96/1941	Test on the Use of Power Gas in the Pure Diesel Process (T.H. DRESDEN)	Dreyhsupt	
75	94/1941	Bomb Tests on Mixture Formation and Combustion with Gasoline Injection (T.H. Craz)	Eienchi	
76	52	Knock Processes in Multi-cylinder Engines (T.H. Munich)	Schmidt & Regel	
77	99/1941	Tests with a Carburettor Engine with Self Ignition (T.H. Stuttgart)	Ernst & Dorr	
78	74	Tests on the Engine Behaviour of Synthetic I.C. Fuels (T.H. Stuttgart)	Kanon	
79	54	Engine Method of Testing Diesel Fuels (T.H. Stuttgart)	Ernst & Gross	
80	86	The Position of 2-Stroke Research	(Various)	6. 6.40.
81	91	Mixture Formation and Combustion (Diesel)	(")	1.10.40.
82	103/1941	2. Meeting of the Working Group for 2-stroke questions	(")	20. 5.41.
83	111/1942	2. Meeting of the Working Group for Questions of Engine Combustion	(")	10.10.41.
84	Vol.3.	Power and Economy of Gas Operated Automobile Engines	Rixmann	1938
85	Vol.4.	New Oil Lubrication of a Connecting Rod Bearing. Investigation of a Automotive Diesel Engine	Huber & Eiberger. Riekert & Ernst.	1938

LIST OF ITEMS

PAGE 5.

(C) DEUTSCHE KRAFTFAHRTFORSCHUNG

<u>CIOS NO.</u>	<u>REPT. NO.</u>	<u>TITLE</u>	<u>AUTHOR(S)</u>	<u>DATE</u>
		Investigation of the Exhausting of the Combustion Chamber of High Speed Diesel and I.C. Engines	Bising	
86	Vol.5.	Contribution to the Exploration of the Combustion Process in High Speed Diesel Engines.	Kneule	1938
87	Vol.29.	Cylinder and Piston Ring Wear	Beck	1939
88	Vol.31.	Measurement of Knock Resistance in I.C. Engines	Schutz	1939
89	Vol.33.	Investigation of Knock Clatter of I.C. Engines with an Electro-Acoustic Measuring Apparatus	Schmidt & Generlich	1939
90	Vol.34.	Mechanical Losses of the High Speed Diesel Engine and their Determination with the Towing Test (Schleppversuch)	Ullman	1939
91	Vol.52	Comparative Investigation of Bearing Shell Materials	Heidebroek & Dorine	1941
92	Vol.53	Injection of Fuels in the Diesel Engine Ignition Delay Measurement by means of Photo Cells in various Crank Regions	Blume Stallechner	1941
93	Vol.54	Detection of Lubricating Film Breakdown by Measuring the Electrical Resistance between Piston Ring and Cylinder	Foppinge	1941
94	Vol.55	Fuel and Engine in the Starting of Automotive Diesel Engines	Rixmann, Schaub & Conrad	1941
95	Vol.57	Fuel Preparation by the Injection Nozzle	Oschatz	1941
96	Vol.59	The Lubricant in the Spur Gear with special Regard for Limit Friction	Pietsch	1941
97	Vol.60	The Operation with Liquid Gas of Mixture Flushed 2 stroke Engines	Schmidt	1941
98	Vol.61	The Scavenging Process on the Basis of a new Conception of Expansion Streaming	Schultz-Grunow & Wiegherdt	1941
99	Vol.62	Increased Loading of 4-Stroke Diesel Engines. The Scavenging Process	Riedel	1941
100	Vol.63	Ignition Delay and the Evaluation of Fuels Ignition Delay Measurement of Diesel and I.C. Engine Fuels	Ernst Widmaier	1941
101	Vol.76	Influence of Air Swirl on the formation of Fuel Stream in the Swirl Chamber	Sauberlich	
		(D) <u>REPORTS FROM THE ERPROBUNGSSTELLE, RECHLIN</u>		
102	2363	Method for Cetane Number Determination of Diesel Fuels.	Lange	18.11.41.
103	2337	SECRET. Behaviour of Aviation Fuels at High Altitude	Ginsmann	18. 4.42.
104	2485	Sludge Formation in Aero Engine Oils	Beier et al.	20. 7.42.
105	2525	Circulation of Lubricating Oil in an Engine with Low Temperature Resistant Aero Engine Oil	Muller & Baier	12. 2.43.

LIST OF ITEMS

PAGE 6.

(D.) REPORTS FROM THE ERPROBUNGSSTELLE, RECHLIN

<u>CIGS NO.</u>	<u>REPT. NO.</u>	<u>TITLE</u>	<u>AUTHOR(S)</u>	<u>DATE</u>
106	2363	Determination of Cetane Number of Diesel Fuels (with the Inertia Indicator according to Dr. Nouranu)	Starke	1. 4.44.

(E.) REPORTS BY THE KRYSTALLISCH-TECHNISCHEN REICHSANSTALT

107	-	Development and testing of a Low Temperature Viscosimeter	Willenberg	1944
108	-	(F.) <u>DVL REPORT</u> Proposals for (Clarification of) Terminology	Phillipovich	13. 5.42.
109	-	Discussion on Aviation Fuel Problems		17. 6.41.

(G.) REPORTS FROM TECHNISCHE HOCHSCHULEN

110	-	Evaluation of Fuels in relation to Vapour Lock Troubles. (Dresden)	Heger & v. Eberan	30. 3.44.
111	-	Mixture Formation in Otto Engines at Starting Fuel Vapour Tension and Starting Process at Low Temperatures (Dresden).	Berninghoff & Schieszl & Hanske	1.12.43.
112	-	Tests to Determine the Pressure Stability of Lubricating Oils (Doctor Thesis, Berlin)	de Jong	
113	-	Investigation of the Lubricating Ability of Oils (Munich)	Kedmer	May 1944
114	-	Gear Tests at 150°C. Oil Bath Temperature (Stuttgart)	Wellinger	5. 8.44.
115	392	Investigations on the Development of Self Ignition Operation in a mixture Compressing Engine (Stuttgart)	Ernst & Barr	29. 3.41.
116	-	Tests on the Heat Stability of Gear Lubricants in respect of the new Uncompounded Gear Oils	Wellinger	9. 5.44.

(H.) START OF REEL 10
REPORTS BY OTHER COMMERCIAL COMPANIES

(I) DEUTSCHE VACUUM OIL.

117	VB532b	Establishing the Limiting Flow Temperature of Lubricating Oils	Paul & Richter	30. 6.43.
118	VB540a	Development of a Test Method for Determining the Low Temperature Behaviour of Lubricating Oils	"	13. 3.44.
119	VB541a	Investigation of the Heat Stability of Wehrmacht SE Gear Oil	"	13. 3.44.
120	VB542a	E.P.Oil (Hypoid Oil for Highly Loaded Operation)	Richter Paul & Urlass	14. 3.44

LIST OF ITEMS

PAGE 7.

(2.) INTAVA

<u>CIOS NO</u>	<u>REPT. NO.</u>	<u>TITLE</u>	<u>AUTHOR(S)</u>	<u>DATE</u>
121	10	Testing Aero Engine Oils in the DKW Engine	Wenzel	20. 3.41.
122	30	Evaluation of Tests in the BMW Oil Test Engine in relation to Oil Coke Formation	Wenzel	30. 9.43.
123	-	(3.) <u>RHENANIA - OSSAG</u> Pump Type Apparatus for Indicating the Low Temperature Behaviour of Engine and Gear Oils	Rossig	25. 4.44.
124	3	Investigation of Gear Oils for Pumpability at Low Temperatures	Zogbaum & Deberitz	1. 7.42.
125	5	Pump Circulation Tests at Low Temperatures (Wehrmacht Gear Oil - Winter)	Hofmann	25. 9.42.
126	7	Preliminary Test for Pumpability of Gear Oils at Low Temperatures	Zogbaum & Deberitz	30. 4.43.
127	10	Testing Wehrmacht Gear Oil 8K for Pumpability at Low Temperatures	Zogbaum	24. 7.43.
128	11	Standardizing the Modified Pump Type Apparatus and Construction of a Curve for Pumpability at Low Temperatures	Zogbaum & Zander	12.10.43.
129	14	Testing the Reference Batch of Wehrmacht 8S Gear Oil for Pumpability	Zogbaum & Schauer	14. 1.44.
130	18	Comparison of the Old Model Pump Type Apparatus with the New Model	Zogbaum	7. 6.44.
(4.) <u>I.G. FARBEN, OPPAU</u>				
131	-	The I.G.Prüfdiesel for Measuring the Ease of Ignition of Fuels	-	18. 2.42.
132	-	Origination and Object of Use of the Test Engine K.	-	27. 2.42.
133	-	Drawings from I.G.Oppau Rept.No.47B	-	-
134	-	" " " " " " 542	-	-
135	-	" " " " " " 518	-	-
136	474	SECRET. A contribution to the Testing of Knock Behaviour of Aviation Fuels in Small Engines	Witschakowski	25. 8.41.
137	489	The carrying out of Octane Number Determinations according to the Oppau Method	Singer	22. 1.42.
(5.) <u>JUNKERS (?)</u>				
138	2037	Influence of Lubricant and Fuel on Deposit Formation and Gas Ring Wear (in a Single Cylinder Diesel Engine, Junko 205)	Sauermilch	12. 5.43.
(6.) <u>DAIMLER BENZ.</u>				
139	-	Cranking Tests with the New Wehrmacht Winter Oils	Hohensee	21. 9.42.

LIST OF ITEMS

PAGE 8.

<u>CIOS NO.</u>	<u>REPT. NO.</u>	<u>TITLE</u>	<u>AUTHOR(S)</u>	<u>DATE</u>
140	-	Cranking Tests at - 20°C with the New Wehrmacht Winter Oils	Hohensee	21. 9.42.
141	-	Standards for Cranking Tests for Evaluation of the Startability of Engine Oils at Low Temperatures	?	22. 6.42.
(7) <u>ADAM OPEL A.G.</u>				
142	S.713	Cold Starting Tests with Wehrmacht all-the-year-round Oil. (Standard Diesel of the Wehrmacht, HWA526)	Grissen	15. 1.43.
143	Z.804	Cold Starting Tests with Wehrmacht all-the-year-round Oil. (Maybach Engine HL62TR)	"	31. 1.41.
144	-	Cold Starting Tests with Wehrmacht all-the-year-round Oil. (BMW 2 Ltr Engine, Type 326)	"	14. 7.41.
(8) <u>HEINZMETALL BOESIG.</u>				
145	-	Testing 14 Uncompounded Gear Oils	Heimann	15. 2.42.
(9) <u>MISCELLANEOUS REPORTS</u>				
146	-	Notes on the Meeting of the Working Committee "Knock Measurement in the I.C. and CFR Engines"	-	23. 6.44.
147	-	Special Committee for Standardising Engine Testing of Diesel Fuels by DVM	-	22. 9.42.
148	-	Standard Method for Diesel Fuels	-	18. 1.41.
149	-	Heating Oil Quality	-	16. 9.33.
150	-	Technical Report on Standardizing Engine Testing of Diesel Fuels (Klockner-Humboldt-Deutz)	-	11. 4.42.
151	-	Instructions for Determining the Pumpability of Heating Oils	-	-
152	-	Instructions for use of the Double Beam Cathode Ray Oscillograph (Quartz - Indicator)	Nier	-