

T.O.M. 142

Index Microfilm Reel 142
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Report on Research and Development of the Oil
Shale Resources of Germany, 1940 - 1945. By
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Appendix:

Series A documents relating in general to the preliminary or
planning stage of the projects.

Document
A-1

Title

Map showing areas explored by coredrilling in
search of the richer beds of oil shale in
Wurttemberg, 1942.

Document	Title
A-2	Discussion concerning oil shale carbonization between Dr. Altpeter, Dr. Schweitzer and Dr. Standmeyer, June 1942.
A-3	A preliminary report on the potential shale oil production of the European continent, exclusive of Russia, July 1943.
A-4	Report on the present technical status and the development of methods for carbonization (rotorting) of oil shales based upon recent and current practice, July 1943.
A-5	Critical observations in regard to treatment of oil shales.
A-6	A discussion regarding the locations where some plants shall be erected. Proceedings of a meeting in the home office of the Wurttemberg government at Stuttgart, September 1943.
A-7	A preliminary survey of the oil shale reserves of Europe together with a brief of the processes available for the treatment of the various oil shales, November 1943.
A-8	Underground carbonization, Schneider Process.

Series B documents relate to operations and activities of the Lurgi Company.

Document	Title
B-1	A process and device for continuous feed low temperature carbonization and gasification of solid fuels and shales containing oil, April 1942.
B-2	A proposal for 1000-ton-daily-capacity carbonization project at Frommern, Wurttemberg, May 1942.
B-3	Schweitzer process for low temperature carbonization of Esthonian oil shale. Proposals made by Dr. Schweitzer, September, 1943.

Series C documents cover the Portland Cement Works' activities associated with the project.

Document	Title
C-1	Low temperature carbonization of oil shale utilizing a trench system (Patent application)

Document	Title
C-2	Process to extract oil from oil shale by distilling the oil shale in its strata (Patent application)
C-3	The Dr. Otto and Company carbonization plant at Portland Cement Works, Dotternhausen, Wurttemberg.
C-4	Remarks concerning a patent application for carbonization utilizing a bath of molten metal.
C-5	Some remarks referring to the patent application for carbonization in a bath of molten metal.
C-6	Report of a meeting with an employee of the Schenk Company at Maulbronn (December in 1944). An arrangement to draw off the molten aluminum from the furnace.
C-7	A discussion of some carbonization problems present in the operations of a retort utilizing molten aluminum, August 1944.
C-8	Some problems bearing on the use of aluminum in oil shale retorts.
C-9	Methods and equipment for electrical carbonization of oil shales, November 1944.
C-10	A new process of low temperature carbonization of oil shale utilizing a bath of molten metal (Aluminum - Silicon alloy, melting point 580°C)

Series D documents record that part of the task which was assigned to Coal Oil Union, which company received S. S. support together with special assistance from the German Navy.

Document	Title
D-1	A Comparison of steel requirements for oil shale carbonization operations utilizing surface retorts and underground chambers in place.
D-2	Kohle-Oil-Union, Schürzinszere Underground Carbonization. Report of the first three tests made at Holzheim. These operations were preliminary to the more extensive development of the underground retorting as practiced at Schürzinszen.

Document	Title
D-3	A brief of the German Navy's interest in the matter of shale oil production from the underground operations conducted by the Kohle-Oil-Union near Schörzingen, Wurttemberg.
D-4	Underground carbonization of oil shale in Wurttemberg.
D-5	A series of fourteen reports, each covering a specific test to determine the amenability of carbonizing oil shale in place underground. (This group appears on a separate reel. See T.O.M. Reel No. 149.)

Series E documents refer to the plans and operations of the German Oil Shale Research Company in the program. This company received both strong S.S. support and financial assistance from the Central Government.

Document	Title
E-1	Report on the development of, and the present status of the Construction Project "Wuste".
E-2	Some observations and conclusions regarding the carbonization of 678 tons of oil shale in a pile 3.18 meters high (Meiler method)
E-3	Results of a series of 27 pilot plant tests conducted at the Schomberg meiler method proving ground, July 1944 to March 1945.
E-4	A suggested new method of building and disposing of meiler piles.
E-5	An attempt to make a rough heat balance sheet for the meiler pile method of carbonization.
E-6	Report for January 1945, Deutsche Olschiefer Forschungsgesellschaft including some data and tables covering laboratory tests.
E-7	Some theoretical and analytical conclusions drawn from the January 1945 Laboratory Research Report.
E-8	A study of the various forms of the meiler pile and its relation to controlled carbonization of the shale.

Document	Title
E-9	Oil shale corrosion problems.
E-10	Some corrosion problems encountered in the production of oil shale.
E-11	Report from Professor Heinze concerning lowering of the pour point by a special agent provided out of a German petroleum oil.
E-12	Results from some laboratory tests conducted to lower the pour point of shale oil by admixtures of other oils.
E-13	Research laboratory reports for the months of November and December 1944.
E-14	Lowering of the pour point.
E-15	Lowering of the pour point.
E-16	Lowering of the pour point by heating up the oils.
E-17	Lowering of the pour point.
E-18	Lowering of the pour point by extraction of the paraffins using solvents.
E-19	Lowering of the pour point by admixing small quantities of various solvents.
E-20	Lowering of the pour point by a slight cracking of the oils.
E-21	Lowering of the pour point.
E-22	Lowering of the pour point.
E-23	Lowering of the pour point utilizing admixtures.
E-24	The determination of suitable methods of concentrating the Kerogen content of oil shales to facilitate analytical studies.
E-25	Lowering of the pour point.

Series F documents cover the account of miscellaneous research and other activities, which were coordinated in a general way with the overall developments and operations.

Documents

Title

- F-1 Some observations and tests bearing on the fusion of shale formed during the process of carbonization, June 1943.
- F-2 A study of the influence of particle size (massivity) on the period necessary for the carbonization of oil shale.
- F-3 Examination of oil shale with the aid of an electron microscope.
- F-4 A laboratory study of the reactions involved during the decomposition and carbonization of oil shales from Wurttemberg, Bulgaria and Estonia.
- F-5 The determination of the phenolics present in the oil shale.
- F-6 An oil shale retort with an automatic continuous feed and discharge.
- F-7 Data with reference to the testing and operation of the Graf Pilot Oil Shale Plant at Schandelah, Brunswick, Germany.
- F-8 A new method of assaying the oil and gas content of bituminous shales.