## CONVERSATION WITH DR. WISSEL, DIRECTOR OF THE POELITZ HYDROGENATION PLANT ON JANUARY 16-19, 1945, CONCERNING THE PROJECT SCHWALBE VII

(Item 14, frames 1-2)
(Marked "Secret")

The Poelitz hydrogenation works plans to transfer a part of its plant to the chalk quarries on Ruegen Island. It is proposed to erect:

a sump-phase chamber
a 300-atm gas-phase prehydrogenation chamber
a 300-atm gasoline-forming chamber, and finally
an 80-atm hydroforming chamber.

About 138,000 tons per year of coal tar or 176,000 tons per year of brown-coal tar should be charged as raw product. There will be produced, depending on the raw product charged, about 83,000 to 99,000 tons per year of gasoline, mainly aviation gasoline of C3 quality, as well as 11,000 tons per year of motor fuel. Joint operation of this plant, under the production management of Poelitz, had been considered in an earlier conversation between Mr. Hugo Stinnes and Dr. Wissel. I emphasized that my visit had purely an informational character. I showed, in the conversation, that it would be expedient, for reasons of political economy, to install a 700-atm gas-phase hydrogenation step instead of the two 300-atm gas-phase chambers connected in series with the annexed hydroforming chamber. In such an arrangement, both of our 700-atm gas-phase chambers, with a total furnace volume of about 1,059 cu ft, each of which could handle half the load, could be used. Eventually, the erection of a single gas-phase chamber, which would allow one to consider assembling a sump-phase chamber out of available furnaces, would also be considered. Furthermore, we could supply the necessary 700-atm injection pumps, gas circulation pumps, compressors, and, also, eventually, booster compressors.

Mr. Wissel investigated the advantage of the 700-atm gas-phase chambers and would declare himself in favor of the arrangement agreed upon if the proper occasion arose.

The project itself is to be erected in two chalk quarries, which are about 2600 feet long and 160 to 260 feet wide and which are situated in parallel positions about 980 feet apart. Since the height of the chalk walls amounts to about 98 feet, all the larger parts of the apparatus should be erected in channels, for the construction of which, the bottoms of the quarries would be dredged about 66 feet deeper.

Both of the quarries should be connected by means of tunnels extending from the lowest pits, in which the machines would be erected. The tunneling work must be carried out with the assistance and with the utilization of the experience of the Stinnes concern.

In this project, about 50 per cent of the plant would be situated underground; the other part would be erected in the channels.

At the moment, in both quarries, there is rain water about 33 feet deep, which must be pumped out.

The disadvantage of the plant lies in the fact that it is not 100 per cent secure against aircraft attacks.

Electrical power is not available; a power plant must be erected.

The cooling water must be pumped from the Kleine Bodden, situated about 3.7 miles away, through a pipe line to the plant. Allegedly the salt content of this water is not too high. On the other hand, the high acid content at the surface must be nullified by deep intakes.

All additional details are to be taken from the enclosed decision of Dr. Kress, of the Reichsanstalt fuer Bodenforschung.

The project was presented to Dr. Krauch of Poelitz at the end of November and rests at present.

Three borings, for examination of the nature of the soil, which, up to the time of my visit, were, unfortunately, only in progress, should be stopped shortly in case no decision is reached.

Bottrop
Jan. 28, 1945

To the Poelitz Hydrogenation Plant
Dr. Wissel
Poelitz, Stettin

(Item 14, frames 3-14)
(Marked "Secret")

For delivery through Laenderbank
Berlin NW7, Unter den Linden 16 House
Subject: Underground Plant, Preliminary Project, Sagard/Ruegen

## SUGGESTIONS FOR THE PRELIMINARY PROJECT OF PARTIAL REMOVAL OF THE POELITZ HYDROGENATION PLANT INTO THE CHALK QUARRY EAST OF SAGARD ON RUEGEN

### I. Statement of the Problem.

In accordance with several previous discussions and with a jointly conducted search for a site, in November of this year, you assigned to us the setting up of a general preliminary project on tunnel-building technic for the planned partial removal of the Poelitz hydrogenation plant into a chalk quarry, east of Sagard on the Ruegen. It is necessary to formulate a graphic description of the project, which includes a general plan of the site, a general elevation, tunnel elevations, drawings of the provided structures with necessary explanations, statements of dimensions, cost estimates, statement of time for building, and statements of arrangement of work and equipment.

### II. Geologic Relationships and Choice of Site.

The surface of the territory of the site considered consists of alluvial deposits, mostly loam and marl, with interspersed sand and thin clay. In places there are chalk formations up to about 160 feet thick. The chalk is soft and can be worked easily. The deposit is interrupted in places and is, in some places, horizontal and, in others, slopes as much as 40 degrees toward the southeast. In places, large lumps of chalk are found in the alluvial soil. The soft friable chalk is easily dredged; it crops out in an almost vertical wall, and therefore would not be too resistant for the building of large unobstructed tunnels.

In the extensive chalk district east of Sagard, between Moenkendorf and Wittenfeld, the hilly land rises to about 300 feet. Since the bottoms of the chalk quarries in that region have an elevation of about 135 to 150 feet, the walls are 150 to 170 feet high.

The quarry situated near Moenkendorf and belonging to Pommerschen Industrieverband is, on account of its structure, little suited for alteration.

About 0.6 mile east of Moenkendorf are two other chalk quarries that lie approximately parallel to each other. They are not in use. The bottoms are under water; the length is about 2700 feet. The quarries are about 1000 feet apart. The walls are 150 to 170 feet high. Some changes in dimensions have been caused by landslides. The surmounting alluvial layers are 33 to 50 feet thick. The water can be pumped out of the quarries, and the plant units can be placed in channels and niches.

The quarries can be connected by a number of tunnels. Relatively good ventilation can thus be obtained. With difficulty, construction of larger cavities should be possible.

About 0.6 mile to the east, is a broader and larger stone quarry about 3300 feet long and 160 to 260 feet wide. This quarry is in use, and, at present, a bottom channel is being dredged. The south wall of this quarry is almost vertical for a distance of 2600 feet. The north wall slopes slightly, but appears to be strong. The rock consists of chalk, which, according to the construction methods tested in France and proposed here by us, can be easily penetrated. It can be assumed that a span of 8 feet of the chalk alone would carry its own weight. Larger excavations require concrete linings, the strength of which will depend on the internal breadth. The chalk can be easily dug out with picks; compressed air is not, therefore, absolutely necessary for excavation. Nevertheless, it is advantageous and, in the interest of rapid construction, desirable to have compressed air hammers available. Because of the possibility of easily working the chalk, good excavation results and, consequently, rapid completion can be obtained. The rock wall 2600 feet long makes possible the beginning of numerous tunnels. In addition, the chalk quarry is favorably situated with respect to communication facilities.

This site is the basis of our preliminary project. During the planning, new viewpoints emerged which make the two quarries, previously mentioned, which are under water, seem worthy of consideration. Since the preliminary work is not yet closed, and since you wanted an immediate idea of the construction time that can be expected, you requested, in the conference in the Reichsamt für Wirtschaftsausbau on the 11th of this month, that we go ahead with our planning for the quarry originally considered.

The quarry, since it has almost vertical walls about 165 feet high, is especially suited to our proposed channel construction methods. As a contrast to niche construction methods, in channel construction methods the larger, more substantial units are placed in dredged channels 66 feet deep, which are dug at the feet of the quarry walls. From the channels, tunnels extend into the quarry walls, in which the smaller, more vulnerable parts of the plant are to be placed. The channels themselves are interconnected by cross-passages for the use of attendants and for piping.

## III. Transportation Facilities.

The Stralsund-Sassnitz railroad runs through the immediate vicinity of the quarry. Furthermore the quarry is connected, by the quarry railroad, with Martinshafen, which is on the west side of the Ruegen. The track is about 40 inches wide. Standard track connections can be made without difficulty. The quarry railroad can be used for transportation. An approach is to be laid out. The quarry is in a favorable position as regards transportation.

## IV. Water-Supply.

Feed water is available at both of the quarries mentioned above and may be used as cooling water. In the immediate vicinity of the quarry is a small stream, the volume of which is yet to be determined, and which may be used as source of fresh water.

The necessary supply of cooling water can not be obtained from the environs. It is to be determined whether cooling water can be obtained from the Spycker See, the chloride content of which is said to be low. If this source is used, cooling-water pipes about 4 miles long will be needed.

## V. Supply of Electrical Energy.

The current supply is still to be determined.

## VI. General Arrangement of the Project.

In the attached sectional drawing No. 106/1a and in the floor plan No. 106/2a, the essentials of the project arrangement are shown. On the bottom of the quarry are two parallel channels 82 feet deep and about 2000 feet long having bottom widths of 33 feet and top widths of about 49 feet. It is to be assumed that the channel walls will have a slope of about 10:1. All tall apparatus is to be set up in these channels. All apparatus over 82 feet in height should be suitably sunk into the floor of the channel.

The channel walls are to be protected against heat radiation by glass wool mats with wire netting. Since different rocks have different resistances to the great heat radiation found in the chemical industry and, as a result of the radiation, tend to scale, we propose to retain Dr. Wieland, Berlin-Dahlem, Drygalskistr. 4, a specially qualified expert on this subject.

The material between the channels is penetrated by small cross-tunnels for piping and for the use of attendants. Away from the channel, perpendicularly into the quarry wall, at the level of the channel floor, run the only tunnels for disposal of vulnerable irreplaceable apparatus.

The general concept has, in conferences between you and ourselves, taken various turns until, at present, it has taken on the form of Plan 106/2a. As has already been brought out several times, we must again emphasize that drastic reduction of the number and of the dimensions of the tunnels is indispensable in the interest of thorough economy and quick completion. We consider it extremely desirable that you revise your project thoroughly with the aim in mind of reducing the number of large tunnels, by placing tall apparatus in the channel or close to the quarry wall, and of reducing still more the breadth of medium and small tunnels.

The fundamental arrangement of the tunnels in our project was based on your sketch. The tunnels are arranged in the order, with respect to operation, that you requested.

In building the plant, the most important requirement is minimum construction time. This requirement is fulfilled if the largest possible number of individual tasks are begun simultaneously and if, whenever possible, the productive levels are immediately reached, i.e. if only a small amount of preliminary work is necessary to start the plant. These conditions are not unfavorable at the site chosen; the channels can be dug out in a short time, and the tunnels can be begun at once. The tunnels should be at the level of the channel floor, since at higher levels protection from bombing is not sufficient.

## VII. Improvement of the Profiles.

The adjustment of the tunnel cross-sections is based on the minima required by you and partially reduced by us. All the tunnel cross-sections are shown in Drawings 106/3, 106/4, and 106/5. All the cross-sections, on account of the weakness of the chalk, are provided with concrete linings 12 to 33 inches thick. In each profile, the roof has a catenary-shaped cross-section. This expedient has the advantage, over the semicircular cross-section of the tunnel roof and over a parabolic cross-section, of mass economy in excavation. The minimum cross-section should have sufficient area for proper ventilation; in the present cases sufficient area has been provided.

## VIII. Ventilation.

In the catenary-shaped tunnel cross-sections are shown the necessary air-channel cross-sections, in the roof, for inlet and outlet air channels and for necessary cross-ventilation. These air channels can be constructed by sinking light horizontal concrete slabs into the roof and subdividing with vertical flat walls. For such air channels, slabs of reinforced concrete or other material may be employed. For the removal of air, a special smaller transverse tunnel, above the work tunnel, would be provided, which would discharge through a shaft suitably placed in the vertical wall. The separate work tunnels could be connected with these ventilation tunnels through chimneys.

We can express the size of the air channel cross-section required and the air velocity if information is given us concerning the amount of heat units to be removed per hour. In regard to the determination of the amount of fresh air going in, we refer to our accompanying paper "Tunnels and Tunnel Construction in Industrial Building", Bauindustrie No. 14, October 15, 1944, page 315, Berlin.

The required volume of fresh air is given by the expression:

$$V = \frac{Q}{y\ Cp\ t} \text{ cu ft per hr,}$$

in which Q = heat input, Btu per hour;
y = specific gravity of air = 0.075 lb per cu ft at 68 F;
Cp = specific heat (constant pressure) = 0.24 Btu per lb per degree F;
t = difference in temperature between incoming and outgoing air, Fahrenheit degrees.

Normally one assumes for t a value of 13 degrees. In chemical manufacturing, however, the heat input is so large that a higher temperature difference (27 to 54 degrees) must be allowed.

From the result calculated as described above, and from the permissible air velocities, the cross-sectional areas of the air channels can be calculated.

## IX. Technical Data.

### 1. Excavation and Debris Disposal.

(a) Additional Excavation.

The additional excavation, conditioned by specific properties, stratification, and excavation technic, is, in the present case, of the order of 5 to 7.5 per cent of the tunnel breadth, and is of relatively greater importance with respect to the smaller entries and communication tunnels.

(b) Loosening.

Loosening of the stone, conditioned by the kind of rock and by methods of excavation, is estimated, in the present case, as 25 to 30 per cent.

### 2. Length of Tunnel, Dimensions of Tunnel, and Calculation of Area.

In attachment 106/a is given a summary of tunnel lengths and dimensions and a calculation of area.

Utilization of the area (=ratio of manufacturing area to total area) is

| | |
|---|---|
| in the tunnels | 89% |
| in the channels | 87% |
| in both portions | 88% |

### 3. Excavation Cross-Sections.

The excavation cross-sections are shown in plate 106/7.

### 4. Mass Calculation.

The mass calculation for excavation and concrete is given in Table 106/7.

The following are to be handled:

| | |
|---|---|
| channel dredging | 13,400,000 cu ft |
| tunnel excavation | 7,680,000 |
| concrete | 1,640,000 |

### 5. Construction Process.

In initiating the construction process, the first step is to carry out the work necessary for the arrangement of the construction place, for employing personnel, and for arranging transportation facilities. The dredging can be started on about the tenth day, and the work on the main tunnels on the sixteenth or eighteenth day, if it be assumed that the chalk dredge already there may be used for the construction work.

It is intended to use dredges for the channel, since one can assume the output of a dredge is about 16,800 cubic feet. Our project requires 4 dredges for each channel. The work of dredging should last 50 days and should be finished at the 60th day. Tunnel excavation and lining with concrete should proceed from the 15th day.

The method of excavation of the tunnels is shown in our drawing 106/6. This technic has been developed and tested successfully, by the authors of this project, in French chalk.

Operations:
1. Excavation and concrete lining of Ulm Section 1.
2. Excavation and concrete lining of Ulm Section 2 and drilling of a roof tunnel.
3. Excavation and concrete lining of Ulm Extension 3 and widening of the roof tunnel.
4. Circular excavation and construction of the Calotte.
5. Concrete lining of the Calotte and internal excavation.
6. Introduction of floor concrete or of the reinforcing beams.

Thus the concrete work may be organized to keep pace with the excavation work. A daily progress of 82 feet may be estimated.

Building time plan 106/8

That the many places in which construction is undertaken make possible extensive parallel and series operation is evident from the building time plan.

A total construction time of 126 days (5 months) is necessary. Installation may be started on the 62nd day, i.e. after approximately 2-1/2 months, if one assumes a month of 25 working days.

X. Rough Construction Costs (Translators' note: A value of $0.40 was assumed for the Reichsmark.)

Building and Accessory Materials:

| | |
|---|---|
| Gravel, 1,640,000 cu ft x 1.25 | 2,050,000 cu ft |
| Cement, 1,640,000 cu ft x 14.7 lb/cu ft | 12,000 tons |
| Reinforcing steel | 200 tons |
| Lumber: Reinforcing wood | 127,000 board ft |
| Planks and scaffolding 2,860,000 board ft x 20% | 572,000 board ft |

Power requirements:

| | | | | | |
|---|---|---|---|---|---|
| Dredge, 13,400,000 cu ft | x 0.074 | kwhr/cu ft | = | 1,000,000 kwhr | |
| Tunnel, 7,680,000 " | x 0.102 | " | = | 800,000 | |
| Concrete, 1,640,000 " | x 0.085 | " | = | 140,000 | |
| Additional | | | | 60,000 | |
| | | | | | 2,000,000 kwhr |

Operating materials, crude oil, coal:

| | | |
|---|---|---|
| 21,000,000 cu ft excavation | | |
| 1,640,000 " concrete | | |
| 22,640,000 " at $0.0034/cu ft | | $ 77,400 |
| Additional | | 2,600 |
| | | $ 80,000 |

Bricks for masonry:

| | |
|---|---|
| 35,300 cu ft x 11 bricks/cu ft | 400,000 bricks |
| Stoneware pipe, 0.6-1.4 in. diam | 10,500 ft |

Time

| | |
|---|---|
| Dredging, 13,400,000 cu ft x 0.0197 hr/cu ft | 265,000 hr |
| Tunnel excavation, 7,680,000 cu ft x 0.226 hr/cu ft | 1,735,000 |
| Wood construction, 1,270,000 board ft x 0.071 hr/board ft | 9,000 |
| Concrete, 1,640,000 cu ft x 0.396 hr/cu ft | 645,000 |
| Masonry, 35,300 cu ft x 0.566 hr/cu ft | 20,000 |
| Drainage, 10,300 ft pipe x 1.219 hr/cu ft | 12,520 |
| Preparation of construction sites, assembly, dismantling | 100,000 |
| Additional, unforeseen | 213,480 |
| | 3,000,000 hr |

Estimated Costs:

| | |
|---|---|
| Total hours, 3,000,000/8 = 375,000 work days | |
| Supervision, 5%, 18,750 days at $6.40 | $ 120,000 |
| Technical workers, 35%, 131,500 days at $4.80 | 632,000 |
| Helpers, 60%, 224,750 days at $4.00 | 899.000 |
| Wages | $1,651,000 |

| | | |
|---|---|---|
| General costs 30% | | $ 494,000 |
| Wages for construction, 6 months at $6,400 | | 38,000 |
| 1 Director | $ 400 | |
| 7 Foremen | 1,960 | |
| 1 Mechanical engineer | 360 | |
| 1 Buyer | 280 | |
| 20 Payroll clerks | 2,400 | |
| 1 Accountant | 240 | |
| 1 Surveyor | 320 | |
| 2 Stenographers | 280 | |
| 1 Storeroom keeper | 160 | |
| | $ 6,400 per month | |
| Social tax 10% | | 3,800 |
| Technical office, 5 months at $1,200 | | 6,000 |
| Social expenditures 10% | | 600 |
| Wages and general costs | | $ 2,193,400 |

Additional Costs:

Wages:

| | | | | |
|---|---|---|---|---|
| Labor | 40,000 days at $1.80 | = | $ 72,000 | |
| | 5,000 " " 1.40 | = | 7,000 | |
| Appointed | 4,000 " " 2.00 | = | 8,000 | |
| | 1,250 " " 1.40 | = | 17,500 | |
| | | | $ 104,500 | |

Material Costs:

| | |
|---|---|
| Gravel, 2,050,000 cu ft at $0.11 | $ 232,000 |
| Cement, 12,000 tons at $1.45 | 17,600 |
| Structural steel, 200 tons at $80 | 16,000 |
| Bricks, 400,000 at $0.12 | 4,800 |
| Stoneware pipe, 10,500 ft at $0.28 | 2,800 |

Operating Material:

| | |
|---|---|
| Electric power, 2,000,000 kwhr at $0.04 | $ 80,000 |
| Crude oil, oil, coal | 80,000 |
| Lumber for installation, 127,000 board ft at $0.05 | 6,600 |
| Permanent lumber, 572,000 board ft at $0.06 | 35,000 |
| Additional structural and accessory materials | 8,800 |
| Freight and transportation costs | 8.000 |
| Equipment costs: Repairs | 32,000 |
| Material costs | 523,600 |
| Wages and general costs | 2,193,400 |
| | $ 2,717,000 |

General business expenses, hazards, proceeds, and tax on turnover, 16% of turnover

$$= \frac{16 \times 100}{100-16} = 19.05\%$$

| | | |
|---|---|---|
| 19.05% of $2,717,000 | | 517,600 |
| | | $ 3,234,600 |
| Additional wages | $104,500 | |
| Tax on turnover, 2% | 2,090 | 106,590 |
| Unforeseen | | 133,410 |
| Rough Cost for Tunnels and Channels | | $ 3,474,600 |

The cost determination gives a rough total of $ 3,474,600

The costs per unit floor area are:

per unit working area (315,000 sq ft) ca. $ 11 per sq ft;

per unit gross area (359,104) sq ft) ca. $ 10 per sq ft.

These costs are very low in comparison to those of other construction methods. This economy is attributable to channel type excavation.

## XI. Maximum Number of Workers.

During the period in which the largest amount of work is done the following employees will be required for the building program:

| | |
|---|---|
| Maximum | 2,900 men |
| Technical workers | 700 men |
| Other personnel | 150 men |
| Helpers | 2,050 men |

## XII. Equipment Needed.

The most important equipment needed is listed below.

4 high-shovel caterpillar dredges (70 cu ft) with Diesel drive
4 low-shovel dredges or grab-bucket cranes (70 cu ft) with caterpillar treads and Diesel drive
20 steam locomotives, 90 gauge, 40-60 hp
20 tunnel locomotives, 60 gauge, 20-40 hp
4 steam locomotives, 60 gauge, 40 hp
200 mine cars (box type), 70 cu ft, 90 gauge
300 mine cars (gondola type), 26 cu ft, 60 gauge
3 miles track, 90 gauge, with fittings
2.4 " " , 60 gauge, " "
40 switches, 90 gauge, right and left
100 " , 60 gauge, " " "
1 stationary compressed-air unit, 5300 cu ft/min intake capacity; in case concreting is to be pneumatic the compressed-air unit must have an output of 7400 cu ft/min
30 compressed-air hammers, with accessories
11,500 ft compressed-air line, 3.94-in.
1,640 ft compressed-air hose.
1 large workshop with accessories
900-gal concrete-mixing chamber in 7 units; in case pneumatic concreting is used, there will also be needed
900-gal mixing chamber Torkretkanonen G5 or G6
20 compressed-air stamps
5 trucks
132,000 board ft of lumber
10-15 tunnel dredges

## XIII. Summary.

(1) The method for digging channels, which is applicable only to firm rock that can be dredged, offers the possibility of partial removal of the Poelitz hydrogenation plant to the chalk quarry near Sagard.

(2) The present project requires a working area of 315,000 sq ft.

| | |
|---|---|
| Construction time | 5 months |
| Beginning of construction | after 2-1/2 months |
| Maximum No. of workers | 2,900 men |
| Technical workers | 700 men |
| Other personnel | 150 men |
| Helpers | 2,050 men |

These figures include an additional 20 per cent for absence due to illness.

(3) The rough construction cost of the project is $3,400,000, i.e.

$11 per sq ft of working area
$10 per sq ft of gross area

(4) Values for expenses, construction time, and work required are subject to revision. Nevertheless, extensive reduction of the cross-sectional areas of the tunnels must be considered in the interest of shorter construction time.

TUNNELBAU
Engineering Office
for Tunnel Planning

Berlin-Charlottenburg
Dec. 14, 1944

CONFERENCE WITH MINERALOELBAU G.m.b.H.

(JULIUS SCHMIDT WORKS, LUCKENWALDE)

JANUARY 12 and 13, 1945
~~(Item 14, frames 15-16)~~
(Marked "Secret")

The conference was held with Director Simmat and Chief Engineer Klink.

Plant Designations:

Schwalbe = Hydrogenation plant.
Dachs = Lubricating oil plant.
Kuckuck = Polymerization and alkylation plant for gasoline.
Taube = Cracking plant.

On account of lack of labor for tunnel construction, and on account of lack of auxiliary machines, only Schwalbe I in Volmetal (Wesseling) and the Kuckuck plant (Leuna) in Niedersachsenwerfen in the Harz Mountains will be pushed on at an accelerated pace. All the other plants will be pushed into the background.

The bottleneck lies principally in the mining and blasting work. Therefore, all additional projected plants should be so constructed that, insofar as possible, all larger units will be placed outside the tunnels against the rock walls. As a result of this arrangement, 100 per cent protection against aircraft attacks naturally no longer exists. Krauch is, as usual, striving for greater protection. At Schwalbe I, only the chambers are outside; all the remaining parts of the plant are inside the tunnels. At the Bruex plant, it is planned to place all parts, even the chambers, together with chamber cranes against the side of the mountain.

The waste water disposal problem is also difficult in the Ruhr district. For this reason, Schwalbe I plans a plant for the concentration of aqueous phenol solutions. For this operation, according to the estimate of Mineraloelbau, about 17 Btu per gallon will be required. Gelsenberg (Schwalbe IV in Lennetal) plans the drainage of the phenol-containing waste water through long conduits into the Emscher.

Mr. Simmat maintains that, according to his information, additional hydrogenation plants in the vicinity of the Ruhr district, and also inside the Ruhr district, are no longer feasible because of transportation difficulties. In his opinion, the districts around Bamberg and around Niedersachsenwerfen are favorable in this respect. In the latter district, as was already mentioned above, I. G. is building the Kuckuck plant in Anhydridgestein. With additional construction in the latter district, a fixed concentration must be taken into account.

The Mineraloel-Baugesellschaft itself is also ready to work out the project for an additional hydrogenation plant for Ruhroel.

Ministry Director Schoenleben in Berlin is concerned with the question of a suitable location.

The agency of the Reichsanstalt für Bodenforschung for the West (principally Sauerland) is located in Brilon (Professor Pegelmann). The expert opinion of this agency is to be sought prior to the construction of a mountain plant in the Sauerland. Unfortunately, it was not possible to reach Professor Pegelmann in Brilon on the return trip, since he had gone to Berlin on business on that day.

Mr. Simmat asked if he could obtain from the Hugo Stinnes Generator-Kraftstoff G.m.b.H. a new generator with two chambers for his passenger car, since the generator he has is defective.

Bottrop
Jan. 28, 1945