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CENTRAL INTELLIGENCE AGENCY  
**INFORMATION REPORT**

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 (FOR KEY SEE REVERSE)

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1. Location.

The Geological Department of the Ministry of Heavy Industry has its offices at Vorosilov ut III, Budapest XIV. It is the only department of the Ministry of Heavy Industry which is outside the ministry building in Markó utca, Budapest V.

2. Chief Personalities.

The head of department is Lajos Reich, a geologist. The deputy head is Robert Csasztni, a former oil worker who attended a Party University and was granted a one year scholarship to Moscow.

3. Functions.

The department directs all geological research in Hungary, with the exception of research carried out by Soviet-controlled firms. These submit reports to the department as a matter of courtesy but, since the information cannot be checked by the department, its reliability is open to doubt.

4. Subdepartments.

- a. Geophysical Subdepartment, controlling the Geophysical Institute.
- b. Geological Subdepartment, controlling the Geological Institute.
- c. Raw Materials Subdepartment.
- d. Deep Drilling Industrial Subdepartment.
- e. Personnel Subdepartment.

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## f. Finance Subdepartment.

5. Geophysical Subdepartment.

a. The administration section, which looks after the Geophysical Institute, is staffed by a geophysicist and typist only. The head is László Faccsinai.

b. Geophysical Institute.

This is housed in another building on Vorosilov ut. Its head is Professor Dombai (fnu). It has sufficient funds, and is being expanded, but it does not assist heavy industry as much as it might because of inexperienced staff. It consists of the following sections:

(1) Gravitational Section.

Its function is to determine the type of minerals under the surface by studying the force of gravity in different areas. Maps are used, with a 2 km. grid, showing the gravitational pull. The instruments used are up-to-date; they were developed by a Hungarian.

(2) Electrical Resistance Section.

(a) This section works on the location of ores by studying the degrees of resistance to electric currents sent down into the earth. The instruments used, both for surface and deep detection, are not so up-to-date as those used by the Gravitational Section.

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(b) The main working areas are: Velence hills, Mecsek hills, Budabánya, Reesk and the Bakony mountains.

(3) Magnetic Section.

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A compass type of instrument is used which, by the deviation of the needle, helps to determine the location of ores.

(4) Radioactivity Section.

This section searches for uranium with Geiger counters. The main working area is in the Velence Hills in the proximity of the coal seams.

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(5) Seismographic Section.

This section attempts to determine seams of different minerals by the use of seismographic instruments. Only three instruments are available, and these, due to a number of faults, have at times given incorrect results.

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6. Geological Subdepartment.

a. The administrative section, which looks after the Geological Institute, is headed by Ferenc Hegedűs, who has one or two assistants.

b. Geological Institute.

(1) The Geological Institute is located at Vorosilov ut 14. Its head is Dr. Jenő Noszky, a qualified geologist. His Deputy is Ede Nausch, a former coal miner, who is a Party man.

(2) Up until April 1954, the staff of the institute numbered 310. At that time about 100 were sent off on work in the provinces. The present strength is about 220, of whom about 100 are fully qualified geologists.

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(3) The annual grant to the institute is 9 to 10 million forints.

(4) There are the following sections:

(a) Records Office.

Strength: Head and 4-5 assistants.

Purpose: To collect and record geological information from outside sources.

(b) Geological Mapping Section.

Strength: Head and 3 assistants. The staff of this section was cut in the spring of 1954.

Work: Geological maps covering the whole country (1:25,000) are being done. Ten have not yet been completed. Geological maps 1:10,000 and 1:5,000 (Topographical) are being drawn for the Mecsek Hills and the Börzsöny and Velence hills areas. Due to lack of instruments and money the larger scale maps are not as accurate as they should be.

(c) Non-Ferrous Metal Research Section.

Strength: 5 or 6.

Task: Direction of prospecting in the Börzsöny and Velence mountain areas.

Velence Hills: This area consists of a large mass which contains ores on the edges. Tunnels have been dug during the last three years but the operation has not proved very successful. Only a small quantity of iron ore and one seam (1-2m wide) of fluorite have been found.

Börzsöny Hills at Gyöngyösoroszi, where volcanic rock has been found. It is not known what ores it contains.

Cserszeg-Tomaj (Lake Balaton): Pirites were found here in 1953, but the ore contained only 10% metal and this was not worth exploiting.

(d) Iron Ore Research Section.

Strength: 4 or 5.

Task: Direction of iron ore prospecting in Recsk, Rudabánya and Mecsek.

Rudabánya: For drilling operations here in 1953, 15 (400 - 600 m) "Craelius" (or Mazalan-Madryl) drills were used. Operations were unsuccessful as the technique used on this ground was wrong. Due to lack of funds only 5 or 6 drills are being used on work this year.

Mecsek: In 1953, teams were looking for FeCO<sub>3</sub>, but were not successful. The section also prospected for manganese ore in the Eger area, working by means of subsidiary tunnels. They found a seam only .05 to .5 m thick, which contained only 6-10% manganese and was not worth exploiting.

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- (e) Hard Coal Research Section.  
 Strength: 4.  
 Task: To explore the area west of the Danube and Budapest for a strata of the eocene period.
- (f) Mineral Raw Material Research Section.  
 Strength: Approximately 3.  
 Task: To prospect for fine resistant clay, kaolin and sand required for glass purposes.
- (g) Hydrological Section.  
 Strength: 8 - 10.  
 Task: To supervise drilling for water and artesian wells. In charge of water supplies for the whole country. Advises on water supplies for new building projects.
- (h) "Karst" Hydrological Section.  
 Still being organized. Intended strength: 23.  
 Task: To study the problem of "Karst" water entering mines in the Dorog and Tatabánya areas.
- (i) Museum and Palaeontological Section.  
 Strength: 8 - 10.  
 Task: To look after the geological museum and to collate and investigate palaeontological information.
- (j) Geochemical Section.  
 Strength: 12 - 16.  
 Task: To analyze minerals. They have one spectroscope at their disposal.
- (k) Ore Analysis Section.  
 This consists of:
- (1) Deep Drillings Laboratory.  
 Strength: 12.  
 Task: To analyze samples of earth from deep drillings all over Hungary. In June 1954 work was being done on samples from the Komlo area, including coal, and on Diatoma, a porous substance used in the manufacture of gun-powder.
- (2) Sedimentary Minerals Laboratory.  
 Strength: 12.  
 Task: Research into sedimentary minerals in connection with physiochemical and "Termikus" differential studies.

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(3) Pollen Analysis Laboratory.

Strength: 4.

Task: The microscopic study of "Spórak" and "Pollenek" (old plants, etc.) and the recording of relevant data. The latest work was on the Jurassic period anthracite in the Mecsek mountains.

(4) Micropalaeontology Subsection.

Strength: 4.

Task: The microscopic study of layers of seams (Foraminifera and Ostrakoda). Exploitation of the results.

(5) Petrographical Subsection.

Strength: 4.

Task: Examination of minerals by means of light and microscopic methods.

(1) Technical Library.

Strength: 15 - 20 draughtsmen and topographers.

(m) Technical Geological Research Team.

Strength: 5.

Task: To complete a geological survey in connection with the Budapest subway.

(n) Manganese Ore Research Team.

Strength: 5.

Task: Prospecting for manganese ore between Zirc and Ocs, particularly near the Urkut and Eplény manganese mines. In 1953 (with a reinforced team) an estimated 300,000 tons of oxydized manganese ore were discovered at Eplény; 500,000 tons more than the estimated 1½ million tons of manganese ore at Urkut were revealed; and an estimated 40 million tons of manganese carbonate ore (MnCO<sub>3</sub>) were located in the Urkut area, whitish-grey in color, and of a type previously believed to be available only in the USSR.

c. In 1954 it was rumored that the Geological Institute would shortly be reorganized: Most of the staff would be transferred to newly set up geological departments of the Ore Mining and Mineral Mining Departments of the Ministry of Heavy Industry, and the institute would concern itself only with map making and theory.

7. Deep Industrial Drilling Subdepartment.

a. This subdepartment controls some nine deep drilling teams throughout the country, which operate on an ad hoc basis. One in the Várpalota area consisted of a geologist and three assistants, ten technicians and some administrative staff. It had 40 small drills, mostly "Craelius". Another, in the Komló coal-bearing area, had 25 drills with a maximum depth capacity of 1,000 m; they were old "Utveiyukodok" and new Soviet rotary machines.

b. The situation with regard to deep drilling machinery is bad. The older

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machines are almost entirely ruined, and the "MY" diesel-driven drills, developed and produced in Hungary, have proved unsatisfactory and are being given up; the material used was faulty, and the construction was poor.

- c. Another difficulty is the lack of drilling tips or bits. There is not a single diamond tip in the whole country. Machines often stand idle because there is no double-walled korona [sic. Korona means crown in English] within 200 km.
- d. Drilling teams are also very short of transport, and the few vehicles available are usually undergoing repair. This means that the work of the drillers cannot be properly supervised and mistakes are frequent.

8. Raw Materials Subdepartment.

This merely keeps records of raw materials available.

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