GEOLOGIC COLUMN AND UNIT DESCRIPTION

| AGE | ROCK UNIT | LITHOLOGY; THICKNESS WHERE KNOWN | UNIT DESCRIPTION |
|-------------|---------------------|---|--|
| QUAITERNARY | Alluvium | Silt, clay and sand; thickness less than 10 meters UNCONFORMITY | Recent alluvium, consisting of silt, clay and sand, is widely distributed along the rivers and the coast of Po Hai [渤海]; it also covers low terrace remnants not shown on the map. The thickness is less than 10 m. |
| | Quaternary deposits | Q: sandy loess; thickness 150 - 200 m Q: silt, clay and quartz sand; thickness unknown | The Quaternary deposits in the Ho-pei[河北] plain range in age from Recent to Pleistocene. Lithologically the deposits can be divided into Q_5 and Q_1 . Q_5 constitutes a fan of the Huang Ho[黃河] in the southern part of the map area. It is composed of a thick bedded light brown to light yellow sandy loess. Q_1 constitutes a fan of the Pai Ho[白河] in the northern part of the map area. It yields ground water, and consists of light yellow to bluish gray silt and clay intercalated with fine-grained quartz sand. According to borehole records the Quaternary deposits near T'ien-ching-hsien[天津縣] attain a maximum thickness of 800 m (YOUNG, 1936). |
| | (° | olumn not drawn) to scale | Ground water The shallow-seated ground water level in the map area lies at the depth of 2 to 4 m. The quality of water is the worst throughout North China because of the high contents of Ca, Cl, Na and K. The deep-seated aquifer is at a depth more than 150 m (KURATA, 1951). The depth along the sea coast is about 200 m or more, deepest in North China. The amount of water is rather small in the southern half and larger in the northern half of the map area. The quality of the water is not good in the southern half (Cl amounting to more than 800 g/l), but is good in the northern half where the Cl content is low. |

REFERENCES

- KURATA, Nobuo, 1943, Deposits of the North China plain: Chishitsugaku Zasshi (Geol. Soc. Japan Jour.), v. 49, no. 587.

 1945, Some results of geological survey in North China and Meng-chiang: Chishitsugaku Zasshi (Geol. Soc. Japan Jour.), v. 51, no. 607.

 1947, Geological study on the sediments in North China plain: Chishitsugaku Zasshi (Geol. Soc. Japan Jour.), v. 53, no. 616-621.

 1947, Results of collecting and prospecting for ground water in North China: Suidō Kyōkai Zasshi (Water Service Assoc. Jour.), no. 150, p. 7-12.

 1949, Outline of inorganic matter in shallow ground water in North China: Rikusuigaku Zasshi (Japanese Jour. Limnology), v. 14, p. 1-6.

 1950, Fundamental consideration on hydrology, III; Supplementary view of North China: Chishitsugaku Zasshi (Geol. Soc. Japan Jour.), v. 56, no. 657.

 1950, Mechanism of occurrence and factors governing the quality of deepseated ground water in the North China plain: Rikusuigaku Zasshi (Japanese Jour. Limnology), v. 14, p. 161-168.
- 1951, (1) Deep-seated ground water in the plains of North China; (2) Ground water of Peiping; (3) Ground water of China; (4) Ground water in North China; in Geology and mineral resources of the Far East, North China, IV-6: Comp. Comm. Geology and Mineral Res. Far East, Tokyo Geog. Soc.
- MURAKAMI, Hideji, 1944, Abnormal quality of the water in the Chinese continent: Water Service Assoc. Jour., no. 138.
- WADA, Tamotsu, 1942, Agriculture in North China, with reference to water supply: Tokyo Seibidō Shoten.
- YOUNG, C. C., and BIEN, M. N., 1936, Some new observations on the Cenozoic geology near Peiping: Geol. Soc. China, Bull., v. 15, no. 2.
- YOSHIMURA, Shinkichi, 1944, Distribution of the Cl content in the ground water in northern part of Ho-pei (Hopeh province): Japan Research Inst. Nat. Res., A, no. 6.