

大正十五年六月

鉾田

縱行三橫行二二
圖幅第九八號

地質說明書

地質調查所

銚田縱行三橫行二二
圖幅第九八號地質說明書

目次

第一章 地質	自一頁至九頁
一 鮮新層	一頁
(一) 武藏野系下部	一頁
(二) 武藏野系上部	三頁
二 洪積層	五頁
三 沖積層	七頁
第二章 應用地質	自九頁至一一頁
一 臺地ノ地下水	九頁
二 鑛泉	一一頁

鉾田

縱行三、橫行二、二
圖幅第九八號

地質説明書

(大正十三年調査
同年稿)

農商務技師 佐藤 戈 止

第一章 地 質

一 鮮新層

(一) 武藏野系下部

凝灰質砂及粘土

凝灰質砂 細粒ニシテ石英、長石、紫蘇輝石、輝石、黒雲母、磁鐵鑛等ヨリ成リ、青灰色ヲ呈シ乾燥スレバ黄灰色トナル

粘土 青灰色、普通厚サ一米内外ニシテ凝灰質砂中ニ介在スルモ時ニ凝灰質砂ト薄ク互層シ其厚サ一米以下ニシテ各層ノ厚サハ十厘内外ナリ

武藏野系下部ハ略水平ニ成層シ臺地ノ下部ニ約三米露出スルモ以下地中ニ没シ

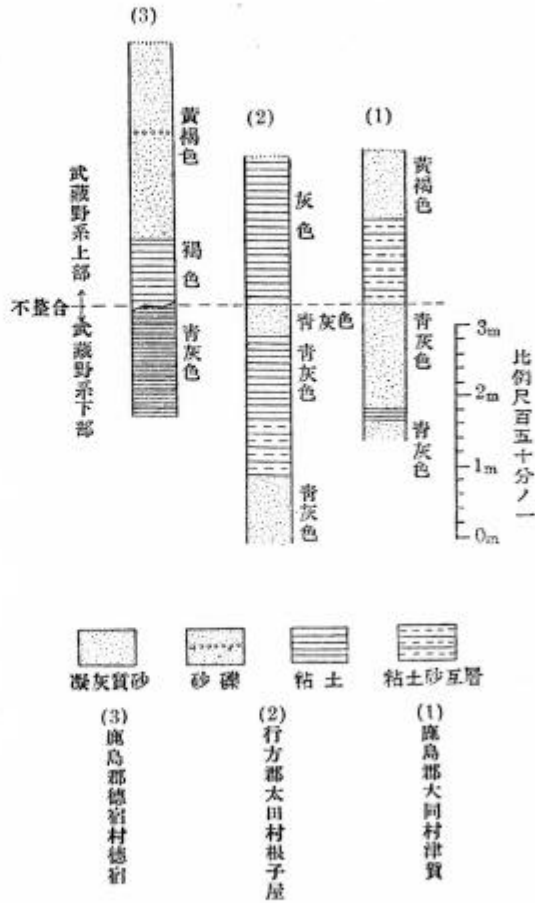
凝灰質砂

細粒ニシテ黄褐色、褐色或ハ白色ヲ呈シ主ニ石英及長石ヨリ成リ少量

凝灰質砂、砂礫及粘土

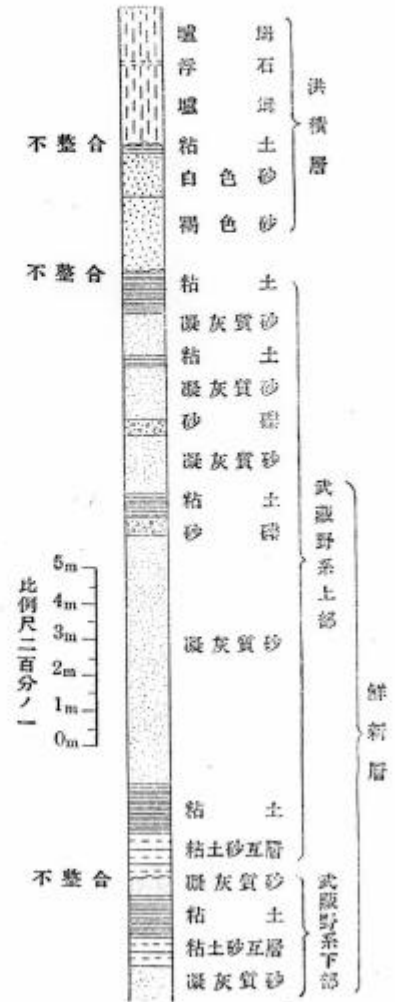
(二) 武藏野系上部

圖 二 第



第一 柱狀断面圖

其層厚ヲ知り難シ、斷崖ノ下部ニ於ケル地質ノ断面ヲ圖示スレハ第二圖ノ如シ



普通褐色ナルモ地域ノ北部ニ於テハ上部ニ白色ヲ呈スルトコロアリ、中粒ニシテ往々偽層ヲナシ石英、長石、紫蘇輝石、褐鐵鑛、磁鐵鑛及黑雲母ヨリ成ル

粘土

白色或ハ緑灰色ヲ呈シ時ニ砂質ナルコトアリ

塩母及浮石

塩母 褐色ヲ呈シ上部ノ腐植セル部分ハ黑色ニ變ス

浮石 黄色、粗粒、柔軟ナリ、厚サ十五糎乃至二十五糎ニシテ塩母中ニ介在ス

洪積層ハ下部ヨリ砂層、粘土層及浮石ノ薄層ヲ挾有スル塩母層ヨリ成リ砂層ハ鮮新層ヲ不整合的ニ被覆シ其厚サ普通三米内外ナルモ地域ノ南部ニ於テハ浸蝕除去セラレテ之ヲ檢スコトヲ得ス、粘土層ハ下位ノ砂層ヲ整合的ニ被覆シ厚サ十五糎内外ナルモ之ヲ缺クトコロ多シ、塩母層ハ下位ノ粘土層ヲ不整合的ニ被覆シ往々洪積砂層或ハ鮮新層ヲ直接被覆シテ臺地ノ最上部ヲナシ厚サ一米乃至四米ニシテ地域ノ北部ニ於テハ浮石ノ薄層ヲ挾有ス

三 沖積層

粘土、砂及砂礫

粘土 黑色又ハ褐灰色ヲ呈シ時ニ砂質ナルコトアリ

砂 黑色又ハ褐灰色、細粒ニシテ時ニ粘土ヲ混ス

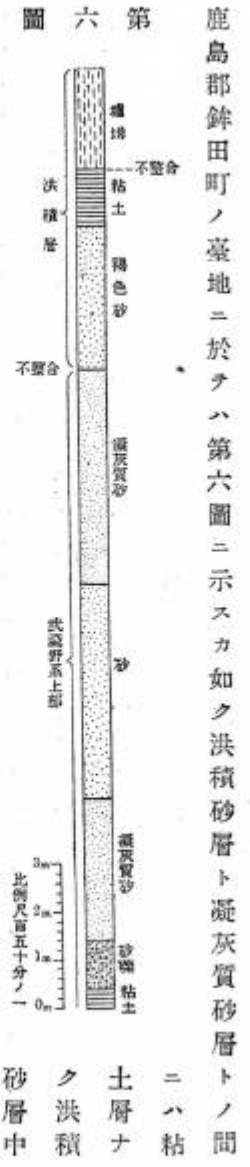
砂礫 灰色ヲ呈シ砂ハ中粒ニシテ礫ハ其大サ一糎内外ナリ

砂

灰白色ヲ呈シ細粒乃至中粒ナリ

沖積層ハ粘土、砂及砂礫ノ累層ト砂層トヨリ成リ前者ハ北浦沿岸及溪谷ニ發達シ後者ハ鹿島灘海岸ニ頒布ス、粘土、砂及砂礫ノ累層ハ各層ノ厚サ及其層序ヲ知ルヘキ資料少キモ第四圖ニ示スカ如キ鑿井ノ記録ニヨリ推察スルニ各層ノ厚サ及其層序ハ甚タ不規則ニシテ隨處異ナルモノ、如シ
鹿島灘海岸ニ頒布スル砂ハ汀ヨリ吹キ上ケラレテ臺地ノ上部ニ及ヒ塩母ヲ被覆

ノ洪積砂層ニ帶水スルヲ以テ本部落附近ニ於テハ該層中ノ水ヲ使用ス、水井ノ深サ六米、水深約一米ニシテ季節ニヨル水井水ノ増減甚シカラス、水質良好ニシテ飲料ニ適ス



ヨリ水ヲ求ムルコト難キヲ以テ凝灰質砂層中ニ深ク水井ヲ掘鑿シ粘土層ノ上部ナル砂礫層中ノ水ヲ使用ス、水井ノ深サ十九米、水深約二五米ニシテ水量稍多ク飲料ニ適ス

以上ノ事實ヲ綜合スルニ臺地ノ下部ニハ三層ノ帶水層アリテ就中洪積砂層中ノ水ハ最モ廣ク使用セラル、モ鉾田町ニ於ケルカ如ク洪積砂層ノ下部ニ粘土層ナキカ或ハ斷崖ニ接近セル臺地上ノ部落ニ於テハ上部ニ帶水層アルモ斷崖ヨリ漏

水シテ上部ヨリ水ヲ求メ難キヲ以テ深ク水井ヲ掘鑿シテ武藏野原上部中ノ水ヲ利用ス

二 鑛 泉

冷泉 ハ鹿島郡徳宿村大字徳宿字兵部山ニアリテ七瀬川ニ臨メル斷崖ノ下部ニ露出スル鮮新期ノ凝灰質砂層中ヨリ湧出ス、鑛泉ハ淡褐色、半透明ニシテ炭酸泉ニ屬ス、明治二十四年頃ノ發見ニ係リ現時ハ田山鬼子藏一浴舎ヲ經營シ火温ヲ加ヘテ深浴ニ供ス

大正十五年七月十六日印刷
大正十五年七月十九日發行

定價金參拾五錢

著作權所有 商 工 省

印刷者 東京市日本橋區兜町二番地 神谷岩次郎

印刷所 東京市日本橋區兜町二番地 東京印刷株式會社

發賣所 東京市日本橋區兜町二番地 東京印刷株式會社

發賣所 東京市日本橋區通三丁目 丸善株式會社

發賣所 東京市日本橋區通三丁目 丸善株式會社

EXPLANATORY TEXT
OF THE
GEOLOGICAL MAP OF JAPAN

Scale 1 : 75,000

HOKOTA

Zone 22 Col. III

Sheet 98

By

Hokoto Sato

Geology

Lower Musashino Formation (Pliocene). This formation is exposed at the foot of the cliffs surrounding the hilly land. The upper part of the formation, so far as it is exposed, is about 3 meters in thickness, and is represented by a bluish gray tufaceous sand intercalated with thin layers of clay of the same tint.

Upper Musashino Formation (Pliocene). This is represented by a yellowish brown tufaceous sand intercalating thin layers of gravel and clay. The beds are nearly horizontal, and unconformably overlie the Lower Musashino Formation. The greatest thickness that the Formation attains is about 17 meters.

Diluvium. This overlies the Upper Musashino Formation unconformably, and consists of sand, clay and loam. The sand is brown or white, and medium-grained. The thickness of the sand is about 3 meters in the northern portion of the sheet-map area, and, gradually becoming thinner southwards, the bed disappears

in the southern portion. A gray or greenish gray clay, occasionally showing a whitish tint and having a thickness of about 15 cm., covers the sand conformably, although in many places it has been entirely eroded. A loam-layer which forms the uppermost part of the Diluvium is widely distributed on the hilly land, covering unconformably the Diluvium clay and sand or the Pliocene tufaceous sand. The thickness of the loam varies from 1 to 4 meters and, in the northern portion of the sheet-map area, it contains a thin layer of pumice, 15-25 cm. in thickness.

Alluvium. This consists of a sand layer and an alternation of clay, sand and gravel, the former being found on the coast of Kashimanada in the form of a narrow belt, and the latter chiefly in the plain around lake Kitaura.

Economic Geology

Water supply. On the hilly land, water is obtained by sinking wells into three water-bearing beds, namely the loam, the Diluvial sand and the tufaceous sand or gravel of the Upper Musashino Formation. The water from the loam is of bad quality, while the water from the other beds may be used for the domestic purposes without filtration.

Mineral spring. In the vicinity of Tokujuku, a small village not far from Hokota, a carburetted cold spring issues from a tufaceous sand of the Upper Musashino Formation, which crops out at the lower part of the steep bank of the Nanase-gawa.
