

others, coloured by vegetable remains, vary from chocolate through brown to black. The diatomaceous earth is cream-coloured to white, very porous, and of low specific gravity. The lignites vary from brown carbonaceous clays to black lignites of good quality. The clays, lignites and diatomaceous earths are discussed further on later pages.

At the west end of the big bend of the Fraser (Figure 12, localities 1, 2, 3), the sediments are well exposed in cliffs rising to elevations of 500 feet above the river. One section (section No. 1) measured at the south end of the cliffs, shows about 460 feet of cemented gravels and clays with a few lignitic seams, the clay lying for the most part near the top of the section. The details of this section are tabulated below.

Section No. 1.

Top of section.	Thickness in feet.
Boulder clay.....	48
Basalt.....	30
Concealed.....	91
Alternating thin beds of clay and gravel.....	4½
Red clay.....	3
Cemented gravel.....	12
Yellowish red clay.....	5
Firmly cemented gravel.....	11
Mottled clay.....	5
Cemented gravel.....	8
Reddish yellow clay with, in middle, a bed of fine-grained, cemented gravel.....	7
Concealed.....	36
Alternating bands of clay and gravel.....	8
Red, consolidated clay.....	14
Gravel with clay.....	3
Grey sandy clay.....	5
Alternating bands of chocolate and grey clay.....	4½
Well cemented, grey, sandy clay.....	3½
Fine-grained gravel.....	2
Grey, yellow brown clay with lignite band.....	4½
Fine-grained gravel.....	6
Sand and gravel in irregular beds.....	128
Sandy clay, red at top.....	2½
Gravel, reddish and cemented at top with iron oxide.....	15
Sandy, yellow clay.....	10
Grey, sandy clay, with a 1-foot band of fine-grained, well cemented gravel.....	20
Gravel.....	16
Grey clay.....	22
Sandy, lignitic clay.....	4½
Gravel with one foot at top well cemented.....	28
Sand.....	2
Character not recorded.....	25
Sand, streaks of iron oxide.....	2
Gravel.....	27
Fraser River level.	Total..... 613½

(The above section was measured on the west side of Fraser river, 8 miles north of Quesnel, at west end of Big Bend, 2 miles west of section No. 2 (Figure 12, locality 4).

Farther north along the cliffs in the direction of the dip, other sections of the strata show that the higher parts of the general sedimentary section contain more clay. On top of the steep cliffs are a number of masses of diatomaceous earth and grey clay which have been affected by sliding