

## Central Davis Sewer District Algal ID and Enumeration Report

Prepared: July 3, 2018

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Samples: 1 (Collected on 6/19/18)

1. FB4

### Sample 1: FB4

Total cell numbers in the FB4 sample collected on 6/19/18 were 590,952 cells/mL. Blue-green algae (Cyanobacteria; 396,411 cells/mL) were the dominant algal group in the sample accounting for 67.1% of total cell numbers. Other algal groups in the sample were diatoms (Bacillariophyceae; 170,556 cells/mL), green algae (Chlorophyta; 13,221 cells/mL), golden-brown algae (Chrysophyceae; 6,911 cells/mL), cryptophytes (Cryptophyta; 84 cells/mL) and unknown unicells and flagellates (Miscellaneous; 3,770 cells/mL). The most abundant algae in the sample were the filamentous cyanophyte *Nodularia spumigena* (207,600 cells/mL; Fig. 1), the colonial cyanophyte *Aphanocapsa/Cyanodictyon* sp. (140,742 cells/mL; Fig. 2) and the diatoms *Chaetoceos* sp. (86,707 cells/mL; Fig. 3) and *Nitzschia closterium* (79,168 cells/mL; Fig. 4). A total of 40 species were observed in the sample.

Total cell numbers of potentially toxigenic cyanobacteria (PTOX Cyano) were 209,939 cells/mL (35.5% of total cell numbers). PTOX Cyano species observed in the sample included *Nodularia spumigena* (207,600 cells/mL) and *Pseudanabaena* sp. (2,339 cells/mL; Fig. 5).



Fig. 1 *Nodularia spumigena* 400X (scale bar = 5 $\mu$ m)

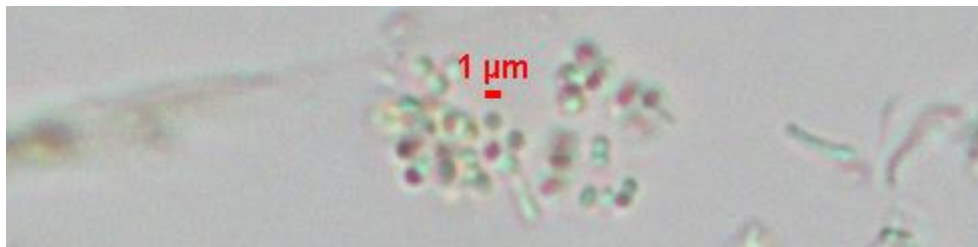


Fig. 2 *Aphanocapsa/Cyanodictyon* sp. 400X (scale bar = 1 $\mu$ m)

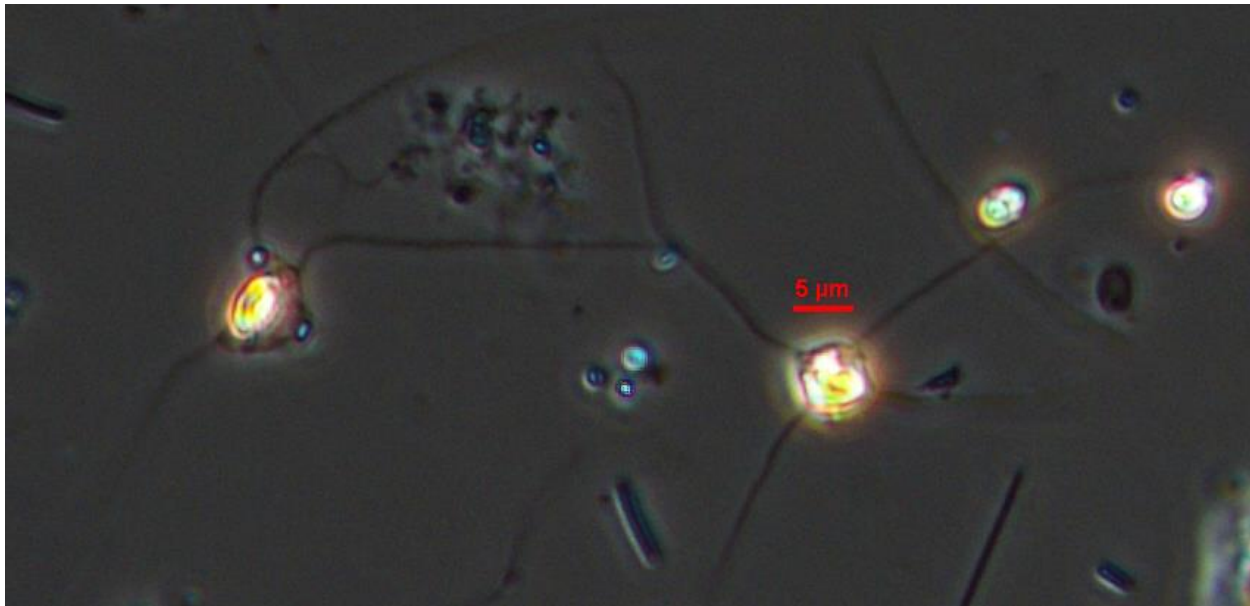


Fig. 3 *Chaetoceros* sp. 400X (scale bar = 5µm)



Fig. 4 *Nitzschia closterium* 400X (scale bar = 10µm)

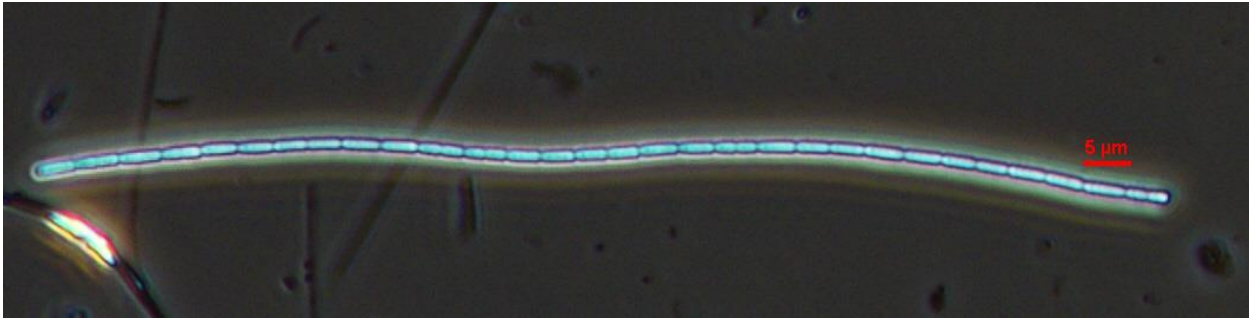


Fig. 5 *Pseudanabaena* sp. 400X (scale bar = 5 $\mu$ m)