Supplementary Information

Supplementary Table S1: Guideline values for heavy metals in wastewater according to regulatory bodies, including the U.S. EPA and the World Health Organization (WHO).

Heavy Metal	**Permissible Limit in Wastewater**
Copper (Cu)	1.0 - 3.0 mg/L
Lead (Pb)	2.0 - 5.0 mg/L
Nickel (Ni)	0.5 - 2.0 mg/L
Zinc (Zn)	2.0 - 5.0 mg/L
Cadmium (Cd)	0.01 - 0.1 mg/L
Iron (Fe)	1.0 - 5.0 mg/L

Supplementary Table S2: Colony morphology and biochemical tests of the isolated bacterial strains

Samples	**Colony Shape**	**Elevation**	**Margin**	**Gram Staining**	**Catalase Test**	**Oxidase Test**
DW 1	Circular	Raised	Entire	Negative	Positive	Negative
DW 2	Irregular	Convex	Undulate	Negative	Positive	Positive
DW 3	Round	Raised	Entire	Negative	Positive	Negative
DW 4	Circular	Convex	Entire	Positive	Negative	Negative
DW 5	Circular	Raised	Entire	Positive	Negative	Negative
DW 6	Round	Raised	Entire	Positive	Negative	Negative
DW 7	Irregular	Raised	Undulate	Negative	Positive	Positive
DW 8	Swarming	Raised	Undulate	Negative	Positive	Negative
DW 9	Irregular	Raised	Lobate	Negative	Positive	Negative
DW10	Round	Raised	Entire	Negative	Positive	Negative
DW11	Circular	Raised	Entire	Negative	Positive	Negative
HW1	Irregular	Raised	Undulate	Negative	Positive	Positive
HW2	Circular	Raised	Entire	Negative	Positive	Negative
HW3	Circular	Raised	Entire	Positive	Negative	Negative
HW4	Circular	Raised	Entire	Negative	Positive	Negative
HW5	Circular	Raised	Entire	Negative	Positive	Negative
HW6	Irregular	Raised	Undulate	Positive	Positive	Negative
HW7	Round	Raised	Entire	Negative	Positive	Negative
HW8	Round	Raised	Entire	Negative	Positive	Negative
HW9	Irregular	Raised	Lobate	Negative	Positive	Positive
HW10	Irregular	Flat	Undulate	Positive	Negative	Negative

HW11	Irregular	Raised	Lobate	Negative	Positive	Positive
HW12	Circular	Raised	Entire	Negative	Positive	Negative
MW1	Irregular	Flat	Undulate	Positive	Negative	Negative
MW2	Circular	Raised	Entire	Positive	Negative	Negative
MW3	Circular	Raised	Entire	Negative	Positive	Negative
MW4	Circular	Raised	Entire	Negative	Positive	Negative
MW5	Swarming	Raised	Undulate	Negative	Positive	Negative
MW6	Circular	Raised	Entire	Negative	Positive	Negative
MW7	Circular	Raised	Entire	Positive	Negative	Negative
MW8	Irregular	Raised	Lobate	Negative	Positive	Positive
MW9	Irregular	Flat	Undulate	Positive	Negative	Negative
MW10	Circular	Raised	Entire	Negative	Positive	Negative
MW11	Circular	Raised	Entire	Positive	Negative	Negative
IW1	Shape	Elevation	Margin	Gram	Catalase	Oxidase
IW2	Irregular	Flat	Undulate	Positive	Negative	Negative
IW3	Swarming	Raised	Undulate	Negative	Positive	Negative
IW4	Circular	Raised	Entire	Positive	Negative	Negative
IW5	Circular	Raised	Entire	Negative	Positive	Negative
IW6	Irregular	Raised	Undulate	Negative	Positive	Positive
IW7	Circular	Raised	Entire	Negative	Positive	Negative
IW8	Round	Raised	Entire	Positive	Negative	Negative
IW9	Swarming	Raised	Undulate	Negative	Positive	Negative
IW10	Irregular	Flat	Undulate	Positive	Negative	Negative
IW11	Circular	Raised	Entire	Negative	Positive	Negative