ATCC medium: 1768 *Geobacter metallireducens* Medium

Ferric citrate (Sigma F-6129)..................13.7 g  
Wolfe’s Vitamin Solution (see below).......10.0 ml  
Wolfe’s Mineral Solution (see below).......10.0 ml  
NaHCO₃..................................2.5 g  
NH₄Cl..................................0.25 g  
NaH₂PO₄·H₂O..........................0.6 g  
KCl..................................0.1 g  
Sodium acetate..........................6.8 g  
Distilled, deionized water..................1.0 L

Heat about 400 ml of water on a hot stir plate to near boiling. Add ferric citrate, allow it to dissolve, then cool the solution to room temperature in a slurry of ice. Add 400 ml of water; this quickly cools the medium to room temperature. Adjust the pH to 6.0 using 10 N NaOH; when the pH approaches 5.0, add NaOH by drops until the pH level is established. Approximately 6 ml of 10 N NaOH per liter will be needed per liter of medium. Add the remaining ingredients and bring the final volume up to 1.0 L with water. Bubble the medium with 80% N₂ and 20% CO₂. The final pH should be 6.8-7.0.

**Do not expose this medium to sunlight.**

Wolfe’s Vitamin Solution:  
Available from ATCC as a sterile ready-to-use liquid (Vitamin Supplement, catalog no. MD-VS).

Biotin..........................2.0 mg  
Folic acid..................2.0 mg  
Pyridoxine hydrochloride........10.0 mg  
Thiamine . HCl..................5.0 mg  
Riboflavin..........................5.0 mg  
Nicotinic acid..................5.0 mg  
Calcium D-(+)-pantothenate......5.0 mg  
Vitamin B12..........................0.1 mg  
p-Aminobenzoic acid...........5.0 mg  
Thioctic acid..................5.0 mg  
Distilled water..................1.0 L

Wolfe’s Mineral Solution:  
Available from ATCC as a sterile ready-to-use liquid (Trace Mineral Supplement, catalog no. MD-TMS.)

Nitrilotriacetic acid........1.5 g  
MgSO₄·7H₂O..................3.0 g  
MnSO₄·H₂O..................0.5 g  
NaCl..........................1.0 g  
FeSO₄·7H₂O..................0.1 g  
CoCl₂·6H₂O..................0.1 g  
CaCl₂..........................0.1 g  
ZnSO₄·7H₂O..................0.1 g  
CuSO₄·5H₂O...............0.01 g  
Al₂(SO₄)₃·12H₂O...........0.01 g  
H₂BO₃..........................0.01 g  
Na₂MoO₄·2H₂O.............0.01 g  
Distilled water..................1.0 L
Add nitrilotriacetic acid to approximately 500 ml of water and adjust to pH 6.5 with KOH to dissolve the compound. Bring volume to 1.0 L with remaining water and add remaining compounds one at a time.